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MAN AND HIS MIGRATIONS.

BY

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ECT. ETC.

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PREFACE.

The following pages represent a Course of Six Lectures delivered at the Mechanics' Institution, Liverpool, in the month of March of the past year; the matter being now laid before the public in a somewhat fuller and more systematic form than was compatible with the original delivery.

CONTENTS.

CHAPTER I.

Page

The Natural or Physical History of Man—the Civil—their difference—divisions of the Natural or Physical History—Anthropology—Ethnology—how far pursued by the ancients—Herodotus—how far by the moderns—Buffon—Linnæus—Daubenton—Camper—Blumenbach—the term *Caucasian*—Cuvier—Philology as an instrument of ethnological investigation—Pigafetta—Hervas—Leibnitz—Reland—Adelung—Klaproth—the union of Philology and of Anatomy—Prichard—its Palæontological character—influence of Lyell's Geology—of Whewell's History of the Inductive Sciences . 9–44

CHAPTER II.

Ethnology—its objects—the chief problems connected with it—prospective questions—transfer of populations—extract from Knox—correlation of certain parts of the body to certain external influences—parts less subject to such influences—retrospective questions—the unity or non-unity of our species—opinions—plurality of species—multiplicity of protoplasts—doctrine of development—Dokkos—extract—antiquity of our species—its geographical origin—the term *race* . . . 45–75

Page

CHAPTER III.

Methods—the science one of observation and deduction rather than experiment—classification—on mineralogical, on zoological principles—the first for Anthropology, the second for Ethnology—value of Language as a test—instances of its loss—of its retention—when it proves original relation, when intercourse—the grammatical and glossarial tests—classifications must be *real*—the distribution of Man—size of areas—ethnological contrasts in close geographical contact—discontinuity and isolation of areas—oceanic migrations 76–108

CHAPTER IV.

Details of distribution—their conventional character—convergence from the circumference to the centre—Fuegians, Patagonian, Pampa, and Chaco Indians—Peruvians — D'Orbigny's characters — other South American Indians—of the Missions—of Guiana—of Venezuela—Guarani—Caribs—Central America—Mexican civilization no isolated phænomenon — North American Indians—Eskimo—apparent objections to their connection with the Americans and Asiatics—Tasmanians—Australians—Papuás—Polynesians—Micronesians—Malagasi—Hottentots—Kaffres—Negroes—Berbers—Abyssinians—Copts—the Semitic family—Primary and secondary migrations 109–166

CHAPTER V.

The Ugrians of Lapland, Finland, Permia, the Ural Mountains and the Volga—area of the light-haired families—Turanians—the Kelts of Ireland, Scotland, Wales, Gaul—the Goths—the Sarmatians—the Greeks and Latins—difficulties of European ethnology—displacement — intermixture — identification of ancient families—extinction of ancient families—the Etruscans

Page

—the Pelasgi—isolation—the Basks—the Albanians—classifications and hypotheses—term Indo-European—the Finnic hypothesis 167–194

CHAPTER VI.

The Monosyllabic area—the T'hay—the Môn and Khô—Tables—the B'hot—the Chinese—Burmese—Persia—India—Tamulian family—the Brahúi—the Dioscurians—the Georgians—Irón—Mizjeji—Lesgians—Armenians—Asia Minor—Lycians—Carians—Paropamisans—Conclusion 195–261

MAN AND HIS MIGRATIONS.

CHAPTER I.

The Natural or Physical History of Man—the Civil—their difference—divisions of the Natural or Physical history—Anthropology—Ethnology—how far pursued by the ancients—Herodotus—how far by the moderns—Buffon—Linnæus—Daubenton—Camper—Blumenbach—the term *Caucasian*—Cuvier—Philology as an instrument of ethnological investigation—Pigafetta—Hervas—Leibnitz—Reland—Adelung—Klaproth—the union of Philology and of Anatomy—Prichard—its Palæontological character—influence of Lyell's Geology—of Whewell's History of the Inductive Sciences.

Let us contrast the *Civil* with the *Natural* History of Man.

The influence of individual heroes, the effect of material events, the operations of ideas, the action and reaction of the different elements of society upon each other, come within the domain of the former. An empire is consolidated, a contest concluded, a principle asserted, and the civil historian records them. He does more. If he be true to his calling, he investigates the

springs of action in individual actors, measures the calibre of their moral and intellectual power, and pronounces a verdict of praise or blame upon the motives which determine their manifestation. This makes him a great moral teacher, and gives a value to his department of knowledge, which places it on a high and peculiar level.

Dealing with actions and motives, he deals nearly exclusively with those of individuals; so much so, that even where he records the movements of mighty masses of men, he generally finds that there is one presiding will which regulates and directs them; and even when this is not the case, when the movement of combined multitudes is spontaneous, the spring of action is generally of a moral nature—a dogma if religious, a theory if political.

Such a history as this could not be written of the brute animals, neither could it be written *for* them. No animal but Man supplies either its elements or its objects; nor yet the record which transmits the memory of past actions, even when they are of the most material kind. The civil historian, therefore, of our species, or, to speak with a conciseness which common parlance allows, the *historian*, living and breathing in the peculiar atmosphere of humanity, and exhibiting man in the wide circle of moral and

intellectual action,—a circle in which none but he moves,—takes up his study where that of the lower animals ends. Whatever is common to them and man, belongs to the naturalist. Let each take his view of the Arab or the Jew. The one investigates the influence of the Bible and the Koran; whilst the other may ask how far the Moorish blood has mixed with that of the Spaniard, or remark the permanence of the Israelite features under climates so different as Poland, Morocco, or Hindostan. The one will think of instincts, the other of ideas.

In what part of the word did this originate? How was it diffused over the surface of the earth? At what period in the world's history was it evolved? Where does it thrive best? Where does it cease to thrive at all? What forms does it take if it degenerate? What conditions of soil or climate determine such degenerations? What favor its improvement? Can it exist in Nova Zembla? In Africa? In either region or both? Do the long nights of the Pole blanch, does the bright glare of the Equator deepen its color? &c. Instead of multiplying questions of this kind, I will ask to what they apply. They apply to every being that multiplies its kind upon earth; to every animal of the land or sea; to every vegetable as well; to every organized being. They apply to the ape,

the horse, the dog, the fowl, the fish, the insect, the fruit, the flower. They apply to these—and they apply to man as well. They—and the like of them—Legion by name—common alike to the lords and the lower orders of the creation, constitute the *natural* history of genus *Homo;* and I use the language of the Zoologist for the sake of exhibiting in a prominent and palpable manner, the truly zoological character of this department of science. *Man as an animal* is the motto here; whilst *Man as a moral being* is the motto with the Historian.

It is not very important whether we call this *Natural* or *Physical* History. There are good authorities on both sides. It is only important to see how it differs from the *History of the Historian.*

Man's Civil history has its divisions. Man's Natural history has them also.

The first of these takes its name from the Greek words for *man* (*anthropos*), and *doctrine* (*logos*), and is known as *Anthropology.*

When the first pair of human beings stood alone on the face of the earth, there were then the materials for Anthropology; and so there would be if our species were reduced to the last man. There would be an Anthropology if the world had no inhabitants but Englishmen, or none but Chinese; none but red men of America, or none but blacks of Africa. Were the

uniformity of feature, the identity of color, the equality of stature, the rivalry of mental capacity ever so great, there would still be an Anthropology. This is because Anthropology deals *with Man as compared with the lower animals.*

We consider the structure of the human extremities, and enlarge upon the flatness of the foot, and the flexibility of the hand. The one is subservient to the erect posture, the other to the innumerable manipulations which human industry demands. We compare them with the fins of fishes, the wings of birds; in doing which, we take the most extreme contrasts we can find. But we may also take nearer approximations, *e. g.* the hands of the higher apes. Here we find likeness as well as difference; difference as well as likeness. We investigate both; and record the result either in detail or by some general expression. Perhaps we pronounce that the one side gives the conditions of an arboreal life, the other those of a social state; the ape being the denizen of the woods, the man of towns and cities; the one a climber, the other a walker.

Or we compare the skull of the man and the chimpanzee; noticing that the ridges and prominences of the external surface, which in the former are merely rudimentary, become strongly marked crests in the latter. We then remem-

ber that the one is the framework for the muscles of the face; the other is the case for the brain.

All that is done in this way is Anthropology.

Every class of organized beings has, *mutatis mutandis*, its anthropological aspect: so that the dog may be contemplated in respect to the fox which equals, the ape which excels, or the kangaroo which falls short of it in its approach to a certain standard of organization: in other words, as *species* and *genera* have their relative places in the ladder of creation, the investigation of such relations is co-extensive with the existence of the classes and groups on which it rests.

Anthropology deals too much with such matters as these to be popular. Unless the subject be handled with excessive delicacy, there is something revolting to fastidious minds in the cool contemplation of the *differentiæ* of the Zoologist,

> "Who shows a Newton as he shows an ape.

Yet, provided there be no morbid gloating over the more dishonorable points of similarity, no pleasurable excitement derived from the lowering view of our nature, the study is *not* ignoble. At any rate, it is part of human knowledge, and a step in the direction of self-knowledge.

Besides this, the relationship is merely one of degree. We may not be either improperly or unpleasantly like the orang-utan or the chimpanzee. We may even be angelomorphic. Nevertheless, we are more like orang-utans and chimpanzees than aught else upon earth.

The other branch of Man's Natural History is called Ethnology—from the Greek word signifying *nation* (*ethnos*).

It by no means follows, tha tbecause there is an *anthropology* there is an *ethnology* also. There is no ethnology where there is but a single pair to the species. There would be no ethnology if all the world were negroes; none if every man was a Chinese: none if there were naught but Englishmen. The absolute catholicity of a religion without sects, the centralized uniformity of a universal empire, are types and parallels to an anthropology without an ethnology. This is because Ethnology deals with *Man in respect to his Varieties.*

There would be an anthropology if but one single variety of mankind existed.

But if one variety of mankind—and no more—existed, there would be no ethnology. It would be as impossible a science as a polity on Robinson Crusoe's island.

But let there be but a single sample of different though similar bodily conformation. Let

there be a white as well as a black, or a black as well as a white man. In that case ethnology begins; even as a polity began on Crusoe's island when his servant Friday became a denizen of it.

The other classes of organized beings, although, *mutatis mutandis*, they have, of necessity, their equivalent to an anthropology, may or may not have an ethnology. The dog has one; the chimpanzee has either none or an insignificant one; differences equivalent to those which separate the cur from the greyhound, or the shepherd's-dog from the pointer, being wanting. Again, a treatise which showed how the chimpanzee differed from the orang-utan on one side, and man on the other, would be longer than a dissertation upon the extent to which the chimpanzees differed from each other: yet a dissertation on the *varieties of dogs* would be bulkier than one on their relations to the fox. This shows how the proportions of the two studies may vary with the species under consideration. In the *Natural History of Man*, the ethnological aspect is the most varied. It is also the one which has been most studied. With the horse, or the sheep, with many of the domestic fowls, with the more widely-cultivated plants, the study of the *variety* outweighs that of the *species*. With the dog it does so in an unparalleled degree. But what if the dog-tribe had the use of language?

What if the language differed with each variety? In such a case the study of canine ethnology would be doubly and trebly complex, though at the same time the *data* for conducting it would be both increased and improved. A distant—a *very* distant approach—to this exists. The wild dog *howls;* the companion of man alone *barks*. This is a difference of language as far as it goes. This is written to foreshadow the importance of the study of language as an instrument of ethnological investigation.

Again—what if the dog-tribe were possessed of the practice of certain human arts, and if these varied with the variety? If they buried their dead? and their tombs varied with the variety? if those of one generation lasted for years, decenniums, or centuries? The ethnology would again increase in complexity, and the *data* would again be increased. The graves of an earlier generation would serve as unwritten records of the habits of sepulture with an earlier one. This is written to foreshadow the importance of the study of antiquities as an instrument of the same kind with philology.

With dogs there are impossibilities. True; but they serve as illustrations. With man they are realities—realities which make philology and archæology important adjuncts to his natural history.

We have now ascertained the character of the study in question; and seen how far it differs from *history* properly so-called—at least we have done so sufficiently for the purpose of definition. A little reflection will show its relations to certain branches of science, *e. g.* to physiology, and mental science—a relation upon which there is no time to enlarge. It is enough to understand the existence of such a separate substantive branch of knowledge and inquiry.

What is the amount of this knowledge? This is proportionate to that of the inquiry. What has this been? Less than we are prepared to expect.

"The proper study of mankind is Man."

This is a stock quotation on the subject.

"Homo sum; humani nihil a me alienum puto."

This is another. Like many apophthegms of the same kind, they have more currency than influence, and are better known than acted on. We know the zoology of nine species out of ten amongst the lower animals better than that of our own genus. So little have the importance and the investigation of a really interesting subject been commensurate.

It is a *new* science—so new as scarcely to have reached the period of adolescence. Let us ask what the ancients cared about it.

We do not look for systematic science in the

Scriptures; and the ethnology which we derive from them consists wholly of incidental notices. These, though numerous, are brief. They apply, too, to but a small portion of the earth's surface. That, however, is one of pre-eminent interest—the cradle of civilization, and the point where the Asiatic, African, and European families come in contact.

Greece helps us more: yet Greece but little. The genius of Thucydides gave so definite a character to history, brought it so exclusively in contact with moral and political, in opposition to physical, phænomena, and so thoroughly made it the study of the statesman rather than of the zoologist, that what may be called the *naturalist* element, excluded at the present time, was excluded more than 2000 years ago. How widely different this from the slightly earlier Herodotean record—the form and spirit of which lived and died with the great father of historic narrative! The history of the Peloponnesian war set this kind of writing aside for ever, and the loss of what the earlier prototype might have been developed into is a great item in the price which posterity has to pay for the κτῆμα ἐς ἀεὶ of the Athenian. As it is, however, the nine books of Herodotus form the most ethnological work not written by a professed and conscious ethnologist. Herodotus was an unconscious and

instinctive one; and his ethnology was of a sufficiently comprehensive character. Manners he noted, and physical appearance he noted, and language he noted; his Scythian, Median, Ægyptian, and other glosses having the same value in the eyes of the closet philologist of the present century, as the rarer fossils of some old formation have with the geologist, or venerable coins with the numismatic archæologist. Let his name be always mentioned with reverence: for the disrespectful manner in which his testimony has been treated by some recent writers impugns nothing but the scholarship of the cavillers.

I do not say that there are no ethnological facts—it may be that we occasionally find ethnological theories—in the Greek writers subsequent; I only state that they by no means answer the expectations raised by the names of the authors and the opportunities afforded by the nature of their subjects. Something is found in Hippocrates in the way of theory as to the effect of external condition, something in Aristotle, something in Plato—nothing, however, by which we find the study of Man as an animal recognized as a separate substantive branch of study. More than this—in works where the description of new populations was especially called for, and where the evidence of the writer would have been of the

most unexceptionable kind, we find infinitely less than there ought to be. How little we learn of Persia from the Cyropædia, or of Armenia from the Anabasis—yet how easily might Xenophon have told us much!

Amongst the successors of Aristotle, we find none who writes a treatise περὶ βαρβάρων—yet how natural the subject, and how great the opportunities!—great, because of the commerce of the Euxine, and the institution of domestic slavery: the one conducting the merchant to the extreme Tanais, the other filling Athens with Thracians, and Asia Minor with Africans. The advantages which the Greeks of the age of Pericles neglected, are the advantages which the Brazilian Portuguese neglect at present, and which, until lately, both the English and the States-men of America neglected also. And the loss has been great. Like time and tide, ethnology waits for no man; and, even as the Indian of America disappears before the European, so did certain populations of antiquity. The process of extinction and amalgamation is as old as history; and whole families have materially altered in character since the beginning of the historical period. The present population of Bulgaria, Wallachia, and Moldavia is of recent introduction. What was the ancient? "Thracians and Getæ," is the answer. But what

were they? "Germans," says one writer; "Slavonians," another; "an extinct race," another. So that there is doubt and difference of opinion. Yet we know some little about them in other respects. We know their political relations; a little of their creed, and manners; the names of some of their tribes. Their place in the classification of the varieties of our species we do *not* know; and this is because, though the Greeks wrote the *civil*, they neglected the ***physical*** history of Man.

Thrace, Asia Minor, and the Caucasus—these are the areas for which the ancients might easily have left descriptions, and for which they neglected to do so; the omission being irreparable.

The opportunities of the Roman were greater than those of the Greek: and they were better used. Dissertations, distantly approaching the character of physical history, occur in even the pure historical writers of Greece. I allude more especially to the sketch of the manners and migrations of the ancient Greeks in the first, and the history of the Greek colonization of Sicily in the sixth book of Thucydides. Parallels to these re-appear in the Roman writers; and, in some cases, their proportion to the rest of the work is considerable. Sallust's sketch of Northern Africa, Tacitus' of Jewish history are of this sort—and, far superior to either, Cæsar's account of Gaul and Britain.

The *Germania** of Tacitus is the nearest approach to proper ethnology that antiquity has supplied. It is far, however, from either giving us the facts which are of the most importance, or exhibiting the *method* of investigation by which ethnology is most especially contrasted with history.

But the true measure of the carelessness of the Romans upon these points is to be taken by the same rule which applied to that of the Greeks; *i. e.* the contrast between their opportunities and their inquiry. Northern Italy, the Tyrol, Dalmatia, Pannonia, have all stood undescribed in respect to the ancient populations; yet they were all in a favorable position for description.

If the Jewish, Greek, and Roman writers give but little, the literatures derived from them give less; though, of course, there is a numerous selection of important passages to be made from the authors of the Middle Ages, as well as from the Byzantine historians. Besides which, there is the additional advantage of Greece and Rome having ceased to be the only countries

* The value of Tacitus as an authority is minutely investigated in an ethnological edition of the *Germania* by the present writer, now in course of publication. The object of the present chapter is merely to show the extent to which the science in question is of recent, rather than ancient, origin.

thought worthy of being written about. A Gothic, a Slavonic, a Moorish history now make their appearance. Still they are but *civil*—not *natural*—histories. However, our sphere of observation increases, the members of the human family increase, and our records increase. Nevertheless, the facts for the *naturalist* occur but incidentally.

Of the Oriental literature I can only give my *impression;* and, as far as that goes, it is in favor of the Chinese statements having the most, and the Indian the least ethnological value: indeed, the former nation appears to have connected the notice of the occupant population with the notice of the area occupied, with laudable and sufficient closeness. I believe, too, that several differences of language are also carefully noted. Still, such ethnology as this supplies is an educt from the works in question, rather than their subject.

We now come to times nearer our own. For a sketch like the present, *Science* begins when the *classification* of the Human Varieties is first attempted. Meanwhile, we must remember that America has been discovered, and that our opportunities now differ from those of the ancients not merely in degree but in kind. The field has been infinitely enlarged; and the world has become known in its extremities as well as

in its middle parts. The human naturalists anterior to the times of Buffon and Linnæus are like the great men before Agamemnon. A minute literary history would doubtless put forward some names for this period; indeed for some departments of the study there are a few great ones. Still it begins with the times of Linnæus and Buffon—Buffon first in merit. That writer held that a *General History of Man*, as well as *A Theory of the Earth*, was a necessary part of his great work; and, as far as the former subject is concerned, he thought rightly. It is this, too, in which he has succeeded best. Thoroughly appreciating its importance, he saw its divisions clearly; and after eight chapters on the Growth of Man, his Decay, and his Senses, he devotes a ninth, as long as the others put together, to the consideration of the *Varieties of the Human Species*. "Every thing," he now writes, "which we have hitherto advanced, relates to Man as an individual. The history of the species requires a separate detail, of which the principal facts can only be derived from the varieties that are found in the inhabitants of different regions. Of these varieties, the first and most remarkable is the color, the second the form and size, and the third the disposition. Considered in its full extent, each of these objects might afford materials for a

volume*." No man need draw a clearer line between anthropology and ethnology than this. Of the systematic classification, which philology has so especially promoted, no signs occur in his treatise; on the other hand, his appreciation of the effects of difference in physical conditions is well-founded in substance, and definitely expressed. To this he attributes the contrast between the Negro, the American, and the African, and, as a natural result, he commits himself unequivocally to the doctrine of the unity of the species.

Linnæus took less cognizance of the species to which he belonged; the notice in the first edition of the *Systema Naturæ* being as follows:—

QUADRUPEDALIA.

Corpus hirsutum, quod spectatur, femina vivipara, lactifera.

ANTHROPOMORPHA.

Dentes primores iv. utrinque vel nulli.

Homo	Nosce teipsum	II.	Europæus albescens. Americanus rubescens. Asiaticus fuscus. Africanus niger.

	Anteriores.	Posteriores.	
Simia	*Digiti* 5.	*Digiti* 5.	Simia, cauda carens. Papio. Satyrus.
	Posteriores anterioribus similes.		Cercopithecus. Cynocephalus.
Bradypus . .	*Digiti* 3. vel 2.	*Digiti* 3.	Ai—*ignavus*. Tardigradus.

* Barr's Translation, vol. iv. p. 191.

Now both Buffon and Linnæus limit their consideration of the bodily structure of man to the phænomena of color, skin, and hair; in other words, to the so-called *soft parts*.

From the Greek word *osteon*=*bone*, we have the anatomical term *osteology*=*the study of the bony skeleton*.

This begins with the researches of the contemporary and helpmate of Buffon. Daubenton first drew attention to the *base of the skull*, and, amongst the parts thereof, to the *foramen ovale* most especially. Through the *foramen ovale* the spinal chord is continued into the brain, or —changing the expression—the brain prolonged into the spinal chord; whilst by its attachments the skull is connected with the vertebral column. The more this point of junction—the pivot on which the head turns—is in the *centre* of the base of the skull, the more are the conditions of the erect posture of man fulfilled; the contrary being the case if the *foramen* lie backward, as is the case with the ape as compared with the Negro, and, in some instances, with the Negro as compared with the European. I say *in some instances*, because the backward position of the *foramen ovale* in the Negro is by no means either definite or constant. Now the notice of the variations of the position of the *foramen ovale*—one of the first specimens of ethnological

criticism applied to the *hard parts* of the human body—is connected with the name of Daubenton.

The study of the skull—for the skeleton is now dividing the attention of investigators with the skin and hair—in *profile* is connected with that of Camper. This brings us to his well-known *facial angle*. It means the extent to which the forehead *retreated*: sloping backwards from the root of the nose in some cases, and in others, rising perpendicularly above the face.

Now the osteology of Daubenton and Camper was the osteology that Blumenbach found when *he* took up the subject. It was something; but not much.

In 1790, Blumenbach published his anatomical description of ten skulls—his first decade—drawn up with the special object of showing how certain varieties of mankind differed from each other in the conformation of so important an organ as the skull of a reasonable being—a being thereby distinguished and characterized.

He continued his researches; publishing at intervals similar decades, to the number of six. In 1820, he added to the last a pentad, so that the whole list amounted to sixty-five.

It was in the third decade, published A. D.

1795, that an unfortunate skull of a Georgian female made its appearance. The history of this should be given. Its owner was taken by the Russians, and having been removed to Moscow died suddenly. The body was examined by Professor Hiltenbrandt, and the skull presented to De Asch of St. Petersburg. Thence it reached the collection of Blumenbach, of which it seems to have been the gem—"*universus hujus cranii habitus tam elegans et venustus, ut et tantum non semper vel indoctorum, si qui collectionem meam contemplentur, oculos eximia sua proportionis formositate feriat.*" This encomium is followed by the description. Nor is this all. A plaster cast of one of the most beautiful busts of the Townley Museum was in possession of the anatomist. He compared the two; "and so closely did they agree that you might take your oath of one having belonged to the other"—"*adeo istud huic respondere vides, ut illud hujus prototypo quondam inhæsisse pejerares.*" Lastly, he closes with an extract from Chardin, enthusiastically laudatory of the beauty of the women of Georgia, and adds that his skull verifies the panegyric—"*Respondet ceteroquin formosum istud cranium, quod sane pro canone ideali habere licet, iis quæ de summa Georgianæ gentis pulcritudine vel in vulgus nota sunt.*"

At the end of the decade in question, he used the epithets Mongolian, Æthiopian, and Caucasian (*Caucasia varietas*).

In the next (A.D. 1808), he speaks of the excessive beauty—the ideal—the normal character of his Georgian skull; and speaks of his osteological researches having established a quinary division of the Human Species; naming them —1. The *Caucasian;* 2. The Mongolian; 3. The Æthiopic; 4. The American; 5. The Malay.

Such is the origin of the term *Caucasian;* a term which has done much harm in Ethnology; a term to which Blumenbach himself gave an undue value, and his followers a wholly false import. This will be seen within a few pages. Blumenbach's Caucasian class contained—

1. Most of the Europeans.

2. The Georgians, Circassians, and other families of Caucasus.

3. The Jews, Arabs, and Syrians.

In the same year with the fourth decade of Blumenbach, John Hunter gave testimony of the value of the study of Man to Man, by a dissertation with a quotation from Akenside on the title-page—

> "————the spacious West
> And all the teeming regions of the South,
> Hold not a quarry, to the curious flight
> Of knowledge half so tempting or so fair,
> As Man to Man."

His tract was an Inaugural Dissertation, and I merely mention it because it was written by Hunter, and dedicated to Robertson.

Cuvier, in his *Règne Animal*, gives at considerable length the anthropological characteristics of Man, and places him as the only species of the genus *Homo*, the only genus of the order *Bimana=two-handed;* the apes being *Quadrumana=four-handed.* This was the great practical recognition of Man in his zoological relations.

In respect to the Ethnology, the classification of Blumenbach was modified — and that by increasing its generality. The absolute primary divisions were reduced to three—the Malay and the American being—not without hesitation—subordinated to the Mongolian. Meanwhile, an additional prominence was given to the group which contained the Australians of Australia, and the Papuans of New Guinea. Instead, however, of being definitely placed, it was left for further investigation.

The abuse of the term Caucasian, was encouraged. Blumenbach had merely meant that his favorite specimen had exhibited the best points in the greatest degree. Cuvier speaks of traditions that ascribe the origin of mankind to the mountain-range so-called—traditions of no general diffusion, and of less ethnological value.

The time is now convenient for taking a retrospective view of the subject in certain other of its branches. Color, hair, skin, bone, stature—all these are points of *physical* conformation or structure; material and anatomical; points which the callipers or the scalpel investigates. But color, hair, skin bone, and stature, are not the only characteristics of man; nor yet the only points wherein the members of his species differ from each other. There is the *function* as well as the organ; and the parts of our body must be considered in regard to what they *do* as well as with reference to what they *are*. This brings in the questions of the phænomena of growth and decay,—the average duration of life,—reproduction, and other allied functions. This, the physiological rather than the purely anatomical part of the subject, requires a short notice of its own. *A priori*, we are inclined to say that it would be closely united, in the practice of investigation, with what it is so closely allied as a branch of science. Yet such has not been exactly the case. The anatomists were physiologists as well; and when Blumenbach described a skull, he certainly thought about the power, or the want of power, of the brain which it contained. But the speculators in physiology were not also anatomists. Such speculators, however, there were. An historian as-

pires to philosophy. There are some facts which he would account for; others on which he would build a system. Hot climates favor precocity of the sexual functions. They also precipitate the decay of the attractions of youth. Hence, a woman who is a mother at twelve, has outgrown her beauty at twenty. From this it follows that mental power and personal attractions become, necessarily, disunited. Hence the tendency on the part of males to take wives in succession; whereby polygamy is shown to have originated in a law of nature.

I do not ask whether this is true or false. I merely remind the reader that the moment such remarks occur, the *natural* history of Man has become recognized as an ingredient in the *civil*.

The chief early writers who expanded the real and supposed facts of the *natural history of Man*, without being professed ethnologists, were Montesquieu and Herder. By advertising the subject, they promoted it. It is doubtful whether they did more.

We are still within the pale of *physical* phænomena; and the purely intellectual, mental, or moral characteristics of Man have yet to be considered. What divisions were founded upon the difference between the arts of the Negro and the arts of the Parisian? What upon the contrasts between the despotisms of Asia and

the constitutions of Europe? What between the cannibalism of New Zealand and the comparatively graminivorous diet of the Hindu? There were not wanting naturalists who, even in *natural history*, insisted upon the high value of such characters, immaterial and supra-sensual as they were. The dog and fox, the hare and rabbit were alike in form; different in habits and temper—yet the latter fact had to be recognized. Nay, more, it helped to verify the specific distinctions which the mere differences of form might leave doubtful.

All that can be said upon this matter is, that no branch of the subject was earlier studied than that which dealt with the manners and customs of strange nations; whilst no branch of it both was and is half so defective as that which teaches us their value as characteristics. With ten writers familiar with the same facts, there shall be ten different ways of appreciating them:—

"Manserunt hodieque manent vestigia ruris."

In the year 1851, this is the weakest part of the science.

With one exception, however—indefinite and inappreciable as may be the ethnological value of such differences as those which exist between the superstitions, moral feelings, natural affections, or industrial habits of different families, there is one great intellectual phænomenon which

in definitude yields to no characteristic whatever—I mean Language. Whatever may be said against certain over-statements as to constancy, it is an undoubted fact that identity of language is *primâ facie* evidence of identity of origin.

No reasonable man has denied this. It is not *conclusive*, but *primâ facie* it undoubtedly is. More cannot be said of color, skin, hair, and skeleton. Possibly, not so much.

Again: language, without being identical, may be similar; just as individuals, without being brothers or sisters, may be first or second cousins. Similarity, then, is *primâ facie* evidence of relationship.

Lastly, this similarity may be weighed, measured, and expressed numerically; an important *item* in its value. Out of 100 words in two allied languages, a per-centage of any amount between 1 and 99 may coincide. Language, then, is a *definite* test, if it be nothing else. It has another recommendation; or, perhaps I should say convenience. It can be studied in the closet: so that for one traveller who describes what he sees in some far-distant country, there may be twenty scholars at work in the libraries of Europe. This is only partially the case with the osteologist.

Philological ethnology began betimes; long

before ethnology, or even anthropology—which arose earlier—had either a conscious separate existence or a name. It began even before the physical researches of Buffon.

"There is more in language than in any of its productions." Many who by no means undervalue the great productions of literature, join in this; indeed, it is only saying that the Greek language is a more wonderful fact than the Homeric poems, or the Æschylean drama. This, however, is only an expression of admiration at the construction of so marvellous an instrument as human speech.

"When history is silent, language is evidence." This is an explicit avowal of its value as an instrument of investigation.

I cannot affiliate either of these sayings, though I hold strongly with both. They must prepare us for a new term—*the philological school of ethnology, the philological principle of classification, the philological test.* The worst that can be said of this is, that it was isolated. The philologists began work independently of the anatomists, and the anatomists independently of the philologists. And so, with one great exception, they have kept on.

Pigafetta, one of the circumnavigators with Magalhaens, was the first who collected specimens of the unlettered dialects of the countries that afforded opportunities.

The Abbé Hervas, in the 17th century, published his Catalogue of Tongues, and Arithmetic of Nations, parts of a large and remarkable work, the *Saggio del Universo*. His *data* he collected by means of an almost unlimited correspondence with the Jesuit missionaries of the Propaganda.

The all-embracing mind of Leibnitz had not only applied itself to philology, but had clearly seen its bearing upon history. A paper on the Basque language is a sample of the ethnology of the inventor of Fluxions.

Reland wrote on the wide distribution of the Malay tongue; criticised certain vocabularies from the South-Sea Islands of Hoorn, Egmont, Ticopia (then called Cocos Island), and Solomon's Archipelago, and gave publicity to a fact which even now is mysterious—the existence of Malay words in the language of Madagascar.

In 1801, Adelung's *Mithridates* appeared, containing specimens of all the known languages of the world; a work as classical to the comparative philologist as Blackstone's Commentaries are to the English lawyer. Vater's Supplement (1821) is a supplement to Adelung; Jülg's (1845) to Vater's.

Klaproth's is the other great classic in this department. His *Asia Polyglotta* and *Sprachatlas* gives us the classification of all the fami-

lies of Asia, according to the *vocabularies* representing their languages. Whether a comparison between their different *grammars* would do the same is doubtful; since it by no means follows that the evidence of the two coincides.

Klaproth and Adelung have the same prominence in *philological*, that Buffon and Blumenbach have in *zoological* ethnology.

Blumenbach *appreciated* the philological method, but the first who *combined* the two was Dr. Prichard. His profession gave him the necessary physiology; and that he was a philologist amongst philologists, is shown not only by numerous details scattered throughout his writings, but by his "Eastern Origin of the Celtic Nations"—the most definite and desiderated addition that has been made to ethnographical philology. I say nothing about the details of Dr. Prichard's great work. Let those who doubt its value, try to do without it.

But there is still something wanting. The relation of the sciences to the other branches of knowledge requires fixing. With anthropology the case is pretty clear. It comes into partial contact with the naturalist sciences (or those based on the principle of classification) and the biological (or those based on the idea of organization and life).

Ethnology, however, is more undecided in

respect to position. If it be but a form of history, its place amongst the inductive sciences is equivocal; since neither the laws which it develops nor the method of pursuing it give it a place here. These put it in the same category with a series of records taken from the testimony of witnesses, or with a book of travels—literary, but not scientific. And so it really is to a certain extent. Two remarkable productions, however, have determined its relations to be otherwise.

In Sir C. Lyell's "Principles of Geology," we have an elaborate specimen of reasoning from the known to the unknown, and of the *inference of causes from effects*. It would have been discreditable to our philosophy if such a sample of logic put in practice had been disregarded.

Soon after, came forth the pre-eminently suggestive works, *par nobile*, of the present Master of Trinity College, Cambridge. Here we are taught that in the sciences of geology, ethnology, and archæology, the *method* determines the character of the study; and that in all these we argue backwards. Present *effects* we know; we also know their *causes* as far as the historical period goes back. When we get beyond this, we can still reason—reason from the experience that the historical period has supplied. Climate, for instance, and certain other con-

ditions have *some* effect; within the limits of generation a small, within that of a millennium a larger one. Hence, before we dismiss a difference as inexplicable, we must investigate the changes that may have produced it, the conditions which may have determined those changes, and the time required from the exhibition of their influence.

In Dr. Prichard's "Anniversary Address," delivered before the Ethnological Society of London in 1847—a work published after the death of its illustrious author—this relationship to Geology is emphatically recognized:—"Geology, as every one knows, is not an account of what nature produces in the present day, but of what it has long ago produced. It is an investigation of the changes which the surface of our planet has undergone in ages long since past. The facts on which the inferences of geology are founded, are collected from various parts of Natural History. The student of geology inquires into the processes of nature which are at present going on, but this is for the purpose of applying the knowledge so acquired to an investigation of what happened in past times, and of tracing, in the different layers of the earth's crust—displaying, as they do, relics of various forms of organic life—the series of the repeated creations which have taken place. This investigation evidently belongs to *History* or *Archæol-*

ogy, rather than to what is termed *Natural History*. By a learned writer, whose name will ever be connected with the annals of the British Association, the term Palæontology has been aptly applied to sciences of this department, for which Physical Archæology may be used as a synonym. Palæontology includes both Geology and Ethnology. Geology is the archæology of the globe—ethnology that of its human inhabitants."

When ethnology loses its palæontological character, it loses half its scientific elements; and the practical and decided recognition of this should be the characteristic of the English school of ethnologists.

This chapter will conclude with the notice of the bearings of the palæontological method upon one of the most difficult parts of ethnology, viz.: the identification of ancient populations, or the distribution of the nations mentioned by the classical, scriptural and older oriental writers amongst the existing or extinct stocks and families of mankind.

There are the Etruscans—who were they? The Pelasgians—who were they? The Huns that overrun Europe in the fifth century; the Cimmerii that devastated Asia, 900 years earlier? Archæology answers some of these questions, and the testimony of ancient writers helps us in others. Yet both mislead, perhaps, almost as often as

they direct us rightly. If it were not so, there would be less discrepancy of opinion.

Nevertheless, up to the present time the primary fact concerning any such populations has always been the testimony of some ancient historian or geographer, and the first question that has been put is, *What say Tacitus—Strabo—Herodotus—Ptolemy*, &c., &c.? In critical hands the inquiries go further, and statements are compared, testimonies weighed in a balance against each other, the opportunities of knowing, and the honesty in recording of the respective authors investigated. In this way a sketch of ancient Greece, by Thucydides, has a value which the authority of a lesser writer would fail to give it, and so on with others. Nevertheless, what Thucydides wrote, he wrote from report and inferences—report, most probably, carefully weighed, and inferences legitimately drawn. Yet sources of error, for which he is not to be held responsible, are innumerable. He went upon hearsay evidence—he sifted it, perhaps; but still he went upon hearsay evidence only. How do we value such evidence? By the natural probabilities of the account it constitutes. By what means do we ascertain these?

I submit there is but one measure here—the existing state of things as either known to ourselves, or known to contemporaries capable of learning them at the period nearest the time

under consideration. This we examine as the effect of some antecedent cause—or series of causes. *Ποῦ στῶ*; says the scholar. On the dictum of such or such an author. *Ποῦ στῶ*; says the Archimedean ethnologist. On the last testified fact.

Of the unsatisfactory character of anything short of contemporary testimony in the identification of ancient nations, the pages and pages that nine-tenths of the historians bestow upon the mysterious *Pelasgi* is a specimen. Add Niebuhr to Müller, and Thirlwall to Niebuhr—Pelion to Ossa, and Olympus to Pelion—and what *facts* do we arrive at—facts that we may rely on as such, facts supported by contemporary evidence, and recorded under opportunities of being ascertained? Just the three recognized by Mr. Grote; viz. that their language was spoken at Khreston—that it was spoken at Plakeæ—that it differed in some unascertained degree, from the Greek.

This is all that the ethnologist recognizes; and from this he argues as he best can. Every fact, less properly supported by either first-hand or traceable evidence, he treats with indifference. It may be good in history; but it is not good for *him*. *He* has too much use to put it to, too much to build upon it, too much argument to work out of it, to allow it to be other than unimpeachable.

Again—Tacitus carries his *Germania* as far as the Niemen, so as to include the present countries of Mecklenburg, Pomerania, Brandenburg, West and East Prussia, and Courland. Is this improbable in itself? No. The area is by no means immoderately large. Is it improbable when we take the present state of those countries in question? No. They are German at present. Is it improbable in any case? and if so, in what? Yes. It becomes improbable when we remember that the present Germans have been as unequivocally and undoubtedly recent immigrants for the parts in question, as are the English of the valley of the Mississippi, and that at the beginning of the historical period the whole of them were Slavonic, with nothing but the phraseology of Tacitus to prevent us from believing that they always had been so. But it is also improbable that so respectable a writer as Tacitus should be mistaken. Granted. And here begins the conflict of difficulties. Nevertheless, the primary ethnological fact is the state of things as it existed when the countries under consideration were first accurately known, taken along with the probability or improbability of its having so existed for a certain period previous, as compared with the probability or improbability of the migrations and other assumptions necessary for its recent introduction.

CHAPTER II.

Ethnology—its objects—the chief problems connected with it—prospective questions—transfer of populations—Extract from Knox—correlation of certain parts of the body to certain external influences—parts less subject to such influences—retrospective questions—the unity or non-unity of our species—opinions—plurality of species—multiplicity of protoplasts—doctrine of development—Dokkos—Extract—antiquity of our species—its geographical origin—the term *race*.

In Cuvier—as far as he goes—we find the anthropological view of the subject predominant; and this is what we expect from the nature of the work in which it occurs: the degree in which one genus or species differs from the species or genus next to it being the peculiar consideration of the systematic naturalist. To exhibit our varieties would have required a special monograph.

In Prichard, on the contary, ethnology preponderates; of anthropology, in the strict sense of the word, there being but little; and the ethnology is of a broad and comprehensive kind. Description there is, and classification there is; but, besides this, there is a great portion of the work devoted to what may be called *Ethnological Dynamics*, i. e. the appreciation of the effect

of the external conditions of climate, latitude, relative sea-level and the like upon the human body.

Prichard is the great repertory of facts; and read with Whewell's commentary it gives us the Science in a form sufficiently full for the purposes of detail, and sufficiently systematic for the basis of further generalization. Still, it must be read with the commentery already mentioned. If not, it fails in its most intellectual element, and becomes a system of simple records, rather than a series of subtle and peculiar inferences. So read, however, it gives us our facts and classifications in a *working form*. In other words, the Science has now taken its true place and character.

If more than this be needed—and for the anthropology, it may be thought by some that Cuvier is too brief, and Prichard too exclusively ethnological—the work of Lawrance forms the complement. These, along with Adelung and Klaproth, form the *Thesaurus Ethnologicus*. But the facts which they supply are like the sword of the Mahometan warrior. Its value depended on the arm that wielded it; and such is the case here. No book has yet been written which can implicitly be taken for much more than its *facts*. Its inferences and classification must be *criticised*. Be this, however, as it may,

in A. D. 1846 Mr. Mill writes, that "concerning the physical nature of man, as an organized being, there has been much controversy, which can only be terminated by the general acknowledgment and employment of stricter rules of induction than are commonly recognized; there is, however, a considerable body of truth which all who have attended to the subject consider to be fully established, nor is there now any radical imperfection in the method observed in this department of science by its most distinguished modern teachers."

This could not have been written thirty years ago. The *department of science* would, then, have been indefinite; and the *teachers* would not have been *distinguished*.

It may now be as well to say what Ethnology and Anthropology are *not*. Their relations to history have been considered. *Archæology* illustrates each; yet the moment that it is confounded with either, mischief follows. *Psychology*, or the Science of the laws of Mind, has the same relation to them as *Physiology—mutatis mutandis; i. e.* putting Mind in the place of Body.

But nearer than either are its two subordinate studies of Ethology,* or the Science of Character, by which we determine the kind of

* From the Greek word (ἦθος) *ethos* = *character*.

character produced in conformity with the laws of Mind, by *any* set of circumstances, *physical* as well as moral; and the Science of Society which investigates the action and reaction of associated masses* on each other.

Such, then, is our Science: which the principle of Division of Labor requires to be marked off clearly in order to be worked advantageously. And now we ask the nature of its *objects*. It has not much to do with the establishment of any *laws* of remarkable generality; a circumstance which, in the eyes of some, may subtract from its value as a science; the nearest approach to anything of this kind being the general statement implied in the classifications themselves. Its real object is the solution of certain *problems*—problems which it investigates by its own peculiar method—and problems of sufficient height and depth and length and breadth to satisfy the most ambitious. All these are referable to two heads, and connect themselves with either the *past* or the *future* history of our species; its *origin* or *destination*.

We see between the Negro and the American a certain amount of difference. Has this always existed? If not, how was it brought

* Called by Comte *Sociology*, a name half Latin and half Greek, and consequently too barbarous to be used, if its use can be avoided.

about? By what influences? In what time? Quickly or slowly? These questions point backwards, and force upon us the consideration of what *has been*.

But the next takes us forwards. Great experiments in the transfer of populations from one climate to another have gone on ever since the discovery of America, and are going on now; sometimes westwards as to the New World; sometimes eastwards as to Australia and New Zealand; now from Celtic populations like Ireland; now from Gothic countries like England and Germany; now from Spain and Portugal;—to say nothing of the equally great phænomenon of Negro slavery being the real or supposed condition of American prosperity. Will this succeed? Ask this at Philadelphia, or Lima, Sydney, or Auckland, and the answer is pretty sure to be in the affirmative. Ask it of one of our English anatomists. His answer is as follows:—"Let us attend now to the greatest of all experiments ever made in respect of the transfer of a population indigenous to one continent, and attempting by emigration to take possession of another; to cultivate it with their own hands; to colonize it; to persuade the world, in time, that they are *the natives* of the newly occupied land. Northern America and Australia furnished the fields of this, the greatest

of experiments. Already has the horse, the sheep, the ox, become as it were indigenous to these lands. Nature did not place them there at first, yet they seem to thrive and flourish, and multiply exceedingly. Yet, even as regards these domestic animals, we cannot be quite certain. Will they eventually be self-supporting? Will they supplant the Ilama, the kangaroo, the buffalo, the deer? or in order to effect this, will they require to be constantly renovated from Europe? If this be the contingency, then the acclimatation is not perfect. How is it with man himself? The man planted there by nature, the Red-Indian, differs from all others on the face of the earth; he gives way before the European races, the Saxon and the Celtic; the Celt, Iberian, and the Lusitanian in the south; the Celt and the Saxon in the north.

"Of the tropical regions of the New World, I need not speak: every one knows that none but those whom nature placed there can live there; that no Europeans can colonize a tropical country. But may there not be some doubts of their self-support in milder regions? Take the Northern States themselves. There the Saxon and the Celt seem to thrive beyond all that is recorded in history. But are we quite sure that this is fated to be permanent? Annualy from Europe is poured a hundred thousand men and

women of the best blood of the Scandinavian, and twice the number of the pure Celt; and so long as this continues, he is sure to thrive. But check it, arrest it suddenly, as in the case of Mexico and Peru; throw the *onus* of reproduction upon the population, no longer European, but a struggle between the European alien and his adopted father-land. The climate; the forests; the remains of the aborigines not yet extinct; last, not least, that unknown and mysterious degradation of life and energy, which in ancient times seems to have decided the fate of all the Phœnician, Grecian, and Coptic colonies. Cut off from their original stock, they gradually withered and faded, and finally died away. The Phœnician never became acclimatized in Africa, nor in Cornwall, nor in Wales; vestiges of his race, it is true, still remain, but they are mere vestiges. Peru and Mexico are fast retrograding to their primitive condition; may not the Northern States, under similar circumstances, do the same?

"Already the United States man differs in appearance from the European: the ladies early lose their teeth; in both sexes the adipose cellular cushion interposed between the skin and the aponeuroses and muscles disappears, or, at least, loses its adipose portion; the muscles become stringy, and show themselves; the tendons

appear on the surface: symptoms of premature decay manifest themselves. Now what do these signs, added to the uncertainty of infant life in the Southern States, and the smallness of their families in the Northern, indicate? Not the conversion of the Anglo-Saxon into the Red-Indian, but warnings that the climate has not been made for him, nor he for the climate.

"See what even a small amount of insulation has done for the French Celt in Lower Canada. Look at the race there! Small men, small horses, small cattle, still smaller carts, ideas smallest of all; he is not even the Celt of modern France! He is the French Celt of the Regency, the thing of Louis XIII. Stationary—absolutely stationary—his numbers, I believe, depend on the occasional admixture of fresh blood from Europe. He has increased to a million since his first settlement in Canada; but much of this has come from Britain, and not from France. Give us the statistics of the original families who keep themselves apart from the fresh blood imported into the province. Let us have the real and solid increase of the original *habitans*, as they are pleased to call themselves, and then we may calculate on the result.

"Had the colony been left to itself, cut off from Europe, for a century or two, it is my belief that the forest and the buffalo, and the Red-

Indian, would have pushed him into the St. Lawrence."*

I give no opinion as to the truth of the extract; remarking that, whether right or wrong, it is forcibly and confidently expressed. All that the passage has to do is to illustrate the character of the question. It directs our consideration to what *will be*.

To work out questions in either of these classes, there must, of course, be some reference to the general operations of climate, food, and other influences;—operations which imply a correlative susceptibility of modification on the part of the human organism.

In a well-constructed machine, the different parts have a definite relation to each. The greater the resistance, the thicker the ropes and chains; and the thicker the ropes and chains, the stronger the pulleys; the stronger the pulleys, the greater the force, and so on throughout. Delicate pulleys with heavy ropes, or light lines with bulky pulleys, would be so much power wasted. The same applies to the skeleton. If the muscle be massive, the bone to which it is attached must be firm; otherwise there is a disproportion of parts. In this respect the organized and animated body agrees with a common machine, the work of human hands. It agrees with, but it also surpasses it. It has an internal

* Knox, Races of Men, pp. 73, 74.

power of self-adjustment. No amount of work would convert a thin line into a strong rope, or a light framework into a strong one. If bulk be wanted, it must be given in the first instance. But what is it with the skeleton, the framework to the muscles? It *has* the power of adapting itself to the stress laid upon it. The food that we live upon is of different degrees of hardness and toughness; and the harder and tougher it is, the more work is there for the muscles of the lower jaw. But, as these work, they grow; for—other things being equal—size is power; and as they grow, other parts must grow also. There are the bones. *How* they grow is a complex question. Sometimes a smooth surface becomes rough, a fine bone coarse; sometimes a short process becomes lengthened, or a narrow one broadens; sometimes the increase is simple or absolute, and the bone in question changes its character without affecting that of the parts in contact with it. But frequently there is a complication of changes, and the development of one bone takes place at the expense of another; the *relations* of the different portions of parts of a skeleton being thus altered.

A skeleton, then, may be modified by the action of its own muscles; in other words, wherever there are muscles that are liable to an increase of mass, there are bones similarly sus-

ceptible—bones upon which asperities, ridges, or processes may be developed—bones from which asperities, ridges, or processes may disappear, and bones of which the relative proportions may be varied. In order, however, that this must take place, there must be the muscular action which determines it.

Now this applies to the *hard parts*, or the skeleton; and as it is generally admitted, that if the bony framework of the body can be thus modified by the action of its own muscles, the extreme conditions of heat, light, aliment, moisture, &c., will, *à fortiori*, affect the soft parts, such as the skin and adipose tissue. Neither have any great difficulties been raised in respect to the varieties of color in the iris, and of color and texture, both, in the hair.

But what if we have in certain *hard* parts a difference without its corresponding tangible modifying cause? What if parts which no muscle acts upon vary? In such a case we have a new class of facts, and a new import given to it. We no longer draw our illustrations from the ropes and pulleys of machines. Adaptation there may be, but it is no longer an adaptation of the simple straightforward kind that we have exhibited. It is an adaptation on the principle which determines the figure-head of a vessel, not one on the principle which decides

the rigging. Still there is a principle on both sides; on one, however, there is an evident connection of cause and effect; on the other, the notions of choice, or spontaneity of an *idea*, is suggested.

In this way, the consideration of a tooth differs from that of the jaw in which it is implanted. No muscles act directly upon it: and all that pressure at its base can do is to affect the direction of its growth. The form of its crown it leaves untouched. How—I am using almost the words of Prof. Owen—can we conceive the development of the great canine of the chimpanzee to be a result of external stimuli, or to have been influenced by muscular actions, when it is calcified before it cuts the gum, or displaces its deciduous predecessor—a structure preordained, a weapon prepared prior to the development of the forces by which it is to be wielded?*

This illustrates the difference between the parts manifestly obnoxious to the influence of external conditions and the parts which either do not vary at all, or vary according to unascertaind laws.

With the former we look to the conditions of sun, air, habits, or latitude; the latter we interpret, as we best can, by references to other

* On the Osteology of the Great Chimpanzee. By Professor Owen, in the Philosophical Transactions.

species, or to the same in its earlier stages of development.

Thus, the so-called supra-orbital ridge, or the prominence of the lower portion of forehead over the nose and eyes, is more marked in some individuals than in others; and more marked in the African and Australian varieties than our own. This is an ethnological fact.

Again—and this is an anthropological fact—it is but moderately developed in man at all: whilst in the orang-utan it is moderate; and in the chimpanzee enormously and characteristically developed.

Hence it is one of the nine points whereby the *Pithecus Wurmbii* approaches man more closely than the *Trolodytes Gorilla*,* in opposition to the twenty-four whereby the *Troglodytes Gorilla* comes nearer to us than the *Pithecus Wurmbii*.

Had this ridge given attachment to muscles, we should have asked what work these muscles did, and how far it varied in different regions, instead of thinking much about either the *Pithecus Wurmbii* or the *Troglodytes Gorilla*.

However, it is certain problems which constitute the higher branches of ethnology; and it is to the investigation of these, that the department of ethnological dynamics is subservient.

* Owen, Philosophical Transactions, Feb. 22, 1848.

Looking *backwards* we find, first amongst the foremost, the grand questions as to—

1. The unity or non-unity of the species.
2. Its antiquity.
3. Its geographical origin.

The unity or non-unity of the human species has been contemplated under a great multiplicity of aspects; some involving the fact itself, some the meaning of the term *species*.

1. Certain points of structure are *constant*. This is one reason for making man the only species of genus, and the only genus of his order.

2. All mixed breeds are prolific. This is another.

3. The evidence of language indicates a common origin; and the simplest form of this is a single pair. This is a third.

4. We can predicate a certain number of general propositions concerning the class of beings called Human. This merely separates them from all other classes. It does not determine the nature of the class itself in respect to its members. It may fall in divisions and subdivisions.

5. The species may be one; but the number of *first pairs* may be numerous. This is the doctrine of the *multiplicity of protoplasts*.*

6. The species may have had no protoplast

* From *protos*=*first*, and *plastos*=*formed*.

at all; but may have been developed out of some species anterior to it, and lower in the scale of Nature, this previous species itself having been so evolved. In this case, the protoplast is thrown indefinitely backwards; in other words, the protoplast of one species is the protoplast of many.

7. The genus *Homo* may fall into several species; so that what some call the *varieties of a single species* are really different species of a single genus.

8. The varieties of mankind may be too great to be included in even a *genus*. There may be two or even more genera to an *order*.

9. Many of the present varieties may represent the intermixtures of species no longer extant in a pure state.

10. All *known* varieties may be referable to a single species; but there may be new species undescribed.

11. All *existing* varieties may be referable to a single species; but certain *species* may have ceased to exist.

Such are the chief views which are current amongst learned men on this point; though they have not been exhibited in a strictly logical form, inasmuch as differences of opinion as to the meaning of the term *species* have been given in the same list with differences of opinion as to the fact of our unity or non-unity.

These differences of opinion are not limited to mere matters of inference. The *facts* on which such inferences rest, are by no means unanimously admitted. Some deny the constancy of certain points of structure, and more deny the *permanent* fecundity of mixed breeds. Again, the evidence of language applies only to known tongues; whilst the fourth view is based upon a *logical* rather than a *zoological* view of *species*.

The doctrine of a *multiplicity of protoplasts* is common. Many zoologists hold it, and they of course have zoological reasons for doing so. Others hold it upon grounds of a very different description—grounds which rest upon the assumption of a final cause. Man is a *social* animal. Let the import of this be ever so exaggerated. The term is a *correlative* one. The wife is not enough to the husband; the *pair* requires its *pair* for society's sake. Hence, if man be not formed to live alone now, he was not formed alone at first. To be born a member of society, there must be associates. This is the teleological*—perhaps it may be called the theological—reason for the multiplicity of protoplasts.

Its *non*-inductive character subtracts something from its value.

* From the Greek *telos—an end.*

The difficulty of drawing a line as to the magnitude of the original society subtracts more. If we admit a second pair, why not grant a village, a town, a city and its corporation? &c.

Again, this is either a primitive civilization or something very like it. Where are its traces? Nevertheless, if we grant certain assumptions in respect to the history of human civilization, the teleological doctrine of the multiplicity of protoplasts is difficult to refute.

And so is the zoological, provided that we make concessions in the way of language. Let certain pairs have been created with the capacity, but not with the gift of speech, so that they shall have learned their language of others. Or let *all*, at first, have been in this predicament, and some have evolved speech earlier than others—a speech eventually extended to all. It is not easy to answer such an argument as this.

The multiplicity of protoplasts is common ground to the zoologist and the human naturalist, although the phænomena of speech and society give the latter the larger share. The same applies to the *doctrine of development*. The fundamental affinity which connects all the forms of human speech is valid against the transcendentalist only when he assumes that each original of a species of Man appeared, as such, with

his own proper language. Let him allow this to have been originally dumb, and with only the capacity of learning speech from others, and all arguments in favor of the unity of species, drawn from the similarity of language, fall to the ground.

The eighth doctrine is little more than an exaggeration of the seventh. The seventh will not be noticed now, simply because the facts which it asserts and denies pervade the whole study of ethnology, and appear and re-appear at every point of our investigations.

All known *varieties may be referable to a single species; but there may be other species undescribed.* What are the reasons for believing this? Premising that Dilbo was a slave from whom Dr. Beke collected certain information respecting the countries to the south-west of Abyssinia, I subjoin the following extract:

"The countries on the west and south-west of Kaffa, are, according to Dilbo, Damboro, Bonga, Koolloo, Kootcha, Soofa, Tooffte, and Doko; on the east and south-east are the plains of Woratto, Walamo, and Talda.

"The country of Doko is a month's journey distant from Kaffa; and it seems that only those merchants who are dealers in slaves go farther than Kaffa. The most common route passes Kaffa in a south-westerly direction, leading to

Damboro, afterwards to Kootcha, Koolloo, and then passing the river Erow to Tooffte, where they begin to hunt the slaves in Doko, of which chase I shall give a description as it has been stated to me, and the reader may use his own judgment respecting it.

"Dilbo begins with stating that the people of Doko, both men and women, are said to be no taller than boys nine or ten years old. They never exceed that height, even in the most advanced age. They go quite naked; their principal food are ants, snakes, mice, and other things which commonly are not used as food. They are said to be so skillful in finding out the ants and snakes, that Dilbo could not refrain from praising them greatly on that account. They are so fond of this food, that even when they have become acquainted with better aliment in Enarea and Kaffa, they are nevertheless frequently punished for following their inclination of digging in search of ants and snakes, as soon as they are out of sight of their masters. The skins of snakes are worn by them about their necks as ornaments. They also climb trees with great skill to fetch down the fruits; and in doing this they stretch their hands downwards and their legs upwards. They live in extensive forests of bamboo and other woods, which are so thick that the slave-hunter finds it very

difficult to follow them in these retreats. These hunters sometimes discover a great number of the Dokos sitting on the trees, and then they use the artifice of showing them shining things, by which they are enticed to descend, when they are captured without difficulty. As soon as a Doko begins to cry he is killed, from the apprehension that this, as a sign of danger, will cause the others to take to their heels. Even the women climb on the trees, where in a few minutes a great number of them may be captured and sold into slavery.

"The Dokos live mixed together; men and women unite and separate as they please; and this Dilbo considers as the reason why the tribe has not been exterminated, though frequently a single slave-dealer returns home with a thousand of them reduced to slavery. The mother suckles the child only as long as she is unable to find ants and snakes for its food: she abandons it as soon as it can get its food by itself. No rank or order exists among the Dokos. Nobody orders, nobody obeys, nobody defends the country, nobody cares for the welfare of the nation. They make no attempts to secure themselves but by running away. They are as quick as monkeys; and they are very sensible of the misery prepared for them by the slave-hunters, who so frequently encircle their forests and drive

them from thence into the open plains like beasts. They put their heads on the ground, and stretch their legs upwards, and cry, in a pitiful manner, 'Yer! yer!' Thus they call on the Supreme Being, of whom they have some notion, and are said to exclaim, 'If you do exist, why do you suffer us to die, who do not ask for food or clothes, and who live on snakes, ants, and mice?' Dilbo stated that it was no rare thing to find five or six Dokos in such a position and state of mind. Sometimes these people quarrel among themselves, when they eat the fruit of the trees; then the stronger one throws the weaker to the ground, and the latter is thus frequently killed in a miserable way.

"In their country it rains incessantly; at least from May to January, and even later the rain does not cease entirely. The climate is not cold, but very wet. The traveller, in going from Kaffa to Doko, must pass over a high country, and cross several rivers, which fall into the Gochob.

"The language of the Dokos is a kind of murmuring, which is understood by no one but themselves and their hunters. The Dokos evince much sense and skill in managing the affairs of their masters, to whom they are soon much attached; and they render themselves valuable to such a degree, that no native of Kaffa ever

sells one of them to be sent out of the country. As Captain Clapperton says of the slaves of Nyffie:—'The very slaves of this people are in great request, and when once obtained are never again sold out of the country.' The inhabitants of Enarea and Kaffa sell only those slaves which they have taken in their border-wars with the tribes living near them, but never a Doko. The Doko is also averse to being sold; he prefers death to separating from his master, to whom he has attached himself.

"The access to the country of Doko is very difficult, as the inhabitants of Damboro, Koolloo, and Tooffte are enemies to the traders from Kaffa, though these tribes are dependent on Kaffa, and pay tribute to its sovereigns; for these tribes are intent on preserving for themselves alone the exclusive privilege of hunting the Dokos, and of trading with the slaves thus obtained.

"Dilbo did not know whether the tribes residing south and west of the Dokos persecute this unhappy nation in the same cruel way.

"This is Dilbo's account of the Dokos, a nation of pigmies, who are found in so degraded a condition of human nature that it is difficult to give implicit credit to his account. The notion of a nation of pigmies in the interior of Africa is very ancient, as Herodotus speaks of them in II. 32."

Now those who believe in the Dokos at all, may fairly believe them to constitute a new species.

Other imperfectly known populations may be put forward in a similar point of view.

All existing *varieties may be referable to a single species; but certain species may have ceased to exist.* There is a considerable amount of belief in this respect. We see, in certain countries, which are at present barbarous vestiges of a prior civilization, works, like those of Mexico and Peru, for instance, which the existing inhabitants confess to be beyond their powers. Be it so. Is the assumption of a different species with architectural propensities more highly developed, legitimate? The reader will answer this question in his own way. I can only say that such assumptions have been made.

Again: ancient tombs exhibit skeletons which differ from the living individuals of the country. Is a similar assumption here justifiable? It has been made.

The most remarkable phænomena of the kind in question are to be found in the history of the Peruvians.

The parts about the Lake Titicaca form the present country of the Aymaras, whose heads are much like those of the other Americans, whose taste for architecture is but slight, and

whose knowledge of having descended from a people more architectural than themselves is none.

Nevertheless, there are vast ruins in their district; whilst the heads of those whose remains are therein preserved have skulls with the sutures obliterated, and with remarkable frontal, lateral, and occipital depressions.

Does this denote an extinct species? Individually, I think it does not; because, individually, with many others, I know that certain habits decline, and I also believe that the flattenings of the head are *artificial*. Nevertheless, if I, ever so little, exaggerated the permanency of habits, or if I identified a habit with an instinct, or if I considered the skulls *natural*, the chances are that I should recognise the remains of ancient *stock*—possibly an ancient *species*—without congeners and without descendants.

The antiquity of the human species.—Our views on this point depend upon our views as to its unity or non-unity; so much so, that unless we assume either one or the other, the question of antiquity is impracticable. And it must also be added that, unless the inquiry is to be excessively complicated, the unity-doctrine must take the form of descent from a single pair.

Assuming this, we take the most extreme

specimens of difference, whether it be in the way of physical conformation or mental phænomena—of these last, language being the most convenient. After this, we ask the time necessary for bringing about the changes effected; the answer to this resting upon the induction supplied within the historical period; an answer requiring the application of what has already been called *Ethnological Dynamics*.

On the other hand, we may assume a certain amount of original difference, and investigate the time requisite for effecting the existing amount of similarity.

The first of these methods requires a long, the second a short period; indeed, descent from a single pair implies a *geological* rather than a *historical* date.

Furthermore: that uniformity in the average rate of change which the geologist requires, ethnology requires also.

The geographical origin of Man.—Supposing all the varieties of Man to have originated from a single protoplast pair, in what part of the world was that single protoplast pair placed? Or supposing such protoplast pairs to have been numerous, what were the respective original locations of each? I ask these questions without either giving any answer to them, or exhibiting any method for discovering one. Of the three

great problems it is the one which has received least consideration, and the one concerning which there is the smallest amount of decided opinion. The conventional, provisional, or hypothetical cradle of the human species is, of course, the most central point of the inhabited world; inasmuch as this gives us the greatest amount of distribution with the least amount of migration; but, of course, such a centre is wholly unhistorical.

Race.—What is the meaning of this word?

Does it mean *variety?* If so, why not say *variety* at once?

Does it mean *species?* If it do, one of the two phrases is superfluous.

In the simple truth it means either or neither, as the case may be; and is convenient or superfluous according to the views of the writer who uses it.

If he believe that groups and classes like the Negro, the Hottentot, the American, the Australian, or the Mongolian, differ from each other as the dog differs from the fox, he talks of *species*. He has made up his mind.

But, perhaps, he does no such thing. His mind is made up the other way. Members of such classes may be to Europeans, and to each other, just what the cur is to the pug, the pointer to the beagle, &c. They may be *varieties*.

He uses, then, the terms accordingly; but in order to do so, he must have made up his mind; and certain classes must represent either one or the other.

But what if he have not done this? If, instead of teaching undoubted facts, he is merely investigating doubtful ones? In this case the term *race* is convenient. It is convenient for him during his pursuit of an opinion, and during the consequent suspension of his opinion.

Race, then, is the term denoting a *species* or *variety*, as the case may be—*pendente lite*. It is a term which, if it conceals our ignorance, proclaims our openness to conviction.

Of the *prospective* views of humanity, one has been considered. But there are others of at least equal importance. Two, out of many, may serve as samples.

1. The first is suggested by the following Table, taken from a fuller one in Mr. D. Wilson's valuable Archæology and Prehistoric Annals of Scotland. It shows the relative proportions of a series of skulls of *very great*, with those of a series of *modern* antiquity.

The study of this—and it requires to be studied carefully—gives grounds for believing that the capacity of a skull may increase as the social condition improves; from which it follows that the physical organization of the less-favored

stocks may develop itself progressively,—and, *pari passu*, the mental power that coincides with it. This illustrates the nature of a certain ethnological question. But what if the two classes of sculls belong to different stocks; so that the owners of one were *not* the progenitors of the proprietors of the other? Such a view (and it is not unreasonable), illustrates the extent to which it is complicated.

		Longitudinal diameter.	Parietal diameter.	Frontal diameter.	Vertical diameter.	Intermastoid arch.	Intermastoid arch from upper root of zygomatic process.	Intermastoid lines.	Ditto from upper root of zygomatic process.	Occipito-frontal arch.	Do frm occipital protuberance to root of nose.	Horizontal periphery.	Relative capacity.
Very old.	1.	7·0	5·4½?	4·9?	4·10	13·11	11·5	3·6½	4·8½	13·9	12·0	20·4	32·2
	2.	7·0	4·8	4·4	5·3	13·2	11·0	4·1	4·10	14·0	11·11	19·6	31·9
	3.	6·11	5·3	3·11	5·0	...	12·0	...	4·8½	14·4	11·4	19·0	30·11
	4.	7·0	4·11	4·4	5·3	13·8	11·4½	4·1	4·10	13·10	11·3	16·7½	28·10½
	5.	6·6	4·11?	4·11	4·2?	14·2	11·3	...	4·8?	13·11	12·0	19·0	29·6
	6.	7·3	5·4	4·6	5·2	14·3	11·9	4·4	5·0½	14·8	12·3	20·8½	33·1½
	7.	7·5	5·2	4·5	5·2	14·3	12·0	3·7	4·10½	14·3	12·3	20·7½	33·2½
	8.	7·9	5·6	4·9	...	...	12·3	...	5·6	15·6	...	21·3	...
	9.	7·3	5·8	4·3½	4·9	14·0	11·9	3·8½	5·0	14·2	11·9	20·7	32·7
Moderately old.	17.	7·9	5·0	4·10	5·6	14·9	11·11	4·0	5·4	15·5	13·6	21·3	34·6
	18.	7·6	5·1	4·6	5·1	14·8	11·3	3·11	5·3	14·6	12·11	20·4	32·11½
	19.	7·3	5·3	4·5	5·4½	14·5	12·4	3·11½	4·9	14·9	12·9	20·10	33·5½
	20.	7·5	5·6½	5·0½	5·6	14·11½	12·3	4·0	...	14·9	12·6	19·10	33·9
	21.	7·3	5·6½	4·4	5·6	14·8	12·0	4·1	5·3	14·5	12·10	20·2	32·11
	22.	7·2	5·7	4·5	5·6	14·9	11·10	4·3	5·6	14·4	12·6	20·0	32·8
	23.	7·3½	5·7	4·6	5·2	15·0	12·4	...	...	14·8	12·6½	19·10½	32·4
	24.	7·2	5·5	4·6	...	...	...	...	...	...	12·10	20·7	...
	25.	7·8	5·6	4·3½	5·3	14·4	11·8	4·7	5·6	14·6	12·7	20·11	33·10
	26.	7·9	5·7	5·3	5·6	15·7	13·3	4·0½	5·4	16·4	14·4	21·11	35·2
	27.	7·11	5·5	4·9	...	...	12·0	...	5·1	15·5	13·9	21·6	...

2. The second, like the first, shall be explained by extracts:

* * * * * *

a. Mrs. ——, a neighbor of Mr. M'Combie, was twice married, and had issue by both husbands The children of the first marriage were five in number; by the second, three. One of these three, a daughter, bears an unmistakable resemblance to her mother's first husband. What makes the likeness the more discernible is, that there was the most marked difference, in their features and general appearance, between the two husbands.

* * * * * *

b. A young woman, residing in Edinburgh, and born of white (Scottish) parents, but whose mother some time previous to her marriage had a natural (Mulatto) child, by a negro-servant, in Edinburgh, exhibits distinct traces of the negro. Dr. Simpson, whose patient the young woman at one time was, has had no recent opportunities of satisfying himself as to the precise extent to which the negro character prevails in her features; but he recollects being struck with the resemblance, and noticed particularly that the hair had the qualities characteristic of the negro.

* * * * * *

c. Mrs. ——, apparently perfectly free from scrofula, married a man who died of phthisis; she had one child by him, which also died of phthisis. She next married a person who was to all appearance equally healthy as herself, and had two children by him, one of which died of phthisis, the other of tubercular mesenteric disease—having, at the same time, scrofulous ulceration of the under extremity.

There are the elements of a theory here; especially if they be taken along with certain phænomena, well-known to the breeders of race-

horses—the theory being, that the mixture of the *distinctive characters* of different divisions of mankind may be greater than the intermixture itself. I give no opinion on the *data*. I merely illustrate an ethnological question—one out of many.

CHAPTER III.

Methods—the science one of observation and deduction rather than experiment—classification—on mineralogical, on zoological principles—the first for Anthropology, the second for Ethnology—value of Language as a test—instances of its loss—of its retention—when it proves original relation, when intercourse—the grammatical and glossarial tests—classifications must be *real*—the distribution of Man—size of area—ethnological contrasts in close geographical contact—discontinuity and isolation of areas—oceanic migrations.

In the Natural History of Man we must keep almost exclusively to the methods of deduction and observation; and in observation we are limited to one sort only, *i. e.*, that simple and spontaneous kind where the object can be found if sought for, but cannot be artificially produced. In other words, there is no great room for *experiment*. The *corpus* is not *vile* enough for the purpose. Besides which, "even if we suppose unlimited power of varying the experiment, (which is abstractedly possible,) though no one but an oriental despot either has the power, or if he had, would be disposed to exercise it, a still more essential condition is wanting—the power of performing any of the experiments with scientific accuracy."* Experiment is near

* Mill (vol. ii.), speaking of the allied subject of the Moral History of Man.

ly as much out of place in Ethnology and Anthropology as it is in Astronomy.

Psammetichus, to be sure, according to Herodotus, did as follows. He took children of a poor man, put them in the charge of a shepherd who was forbidden to speak in their presence, suckled them in a lone hut through a she-goat, waited for the age at which boys begin to talk, and then took down the first word they uttered. This was *bekos*, which when it was shown to mean in the Phrygian language *bread*, the Egyptians yielded the palm of antiquity to that rival.

Now this was an ethnological experiment; but then Psammetichus *was* an oriental despot, and the instance itself is, probably, the only one of its class—the only one, or nearly so—the only one which is a true experiment; since in order to be such, there must be a definite and specific end or object in view.

We know the tradition about Newton and the apple. This, if true, was no experiment, but an observation. To have been the former, the tree should have been shaken for the purpose of seeing the fruit descend. There would then have been an end and aim—malice prepense, so to say.

Hence the phænomena of the African slave-trade, of English emigration, and of other simi-

lar elements for observation are no experiments; since it has not been Science that either the slaver or the settler ever thought about. Sugar or cotton, land or money, was what ran in their heads.

The revolting operation by which the jealous Oriental labors to secure the integrity of his harem, is in its end a scientific fact. It tells how much the whole system sympathises with the mutilation of one of its parts. But it is nothing for Science to either applaud or imitate. It is repeated by the sensual Italian for the sake of ensuring fine voices in the music-market: and Science is disgusted at its repetition. Even if done in her own name, and for her own objects, it would still be but an inhuman and intolerable form of zootomy.

Still the trade in Africans, and the emigration of Englishmen are said to partake of the nature of a scientific experiment, even without being one. They are said to serve as such. So they do; yet not in the way in which they are often interpreted. A European regiment is decimated by being placed on the Gambia, or in Sierra Leone. The American Anglo-Saxon is said to have lost the freshness of the European —to have become brown in color, and wiry in muscle. Perhaps he has. Yet what does this prove? Merely the effect of *sudden* changes;

the results of *distant* transplantation; the imperfect character of those forms of acclimatization which are not *gradual*. It was not in this way that the world was originally peopled. New climates were approached by degrees, step by step, by enlargement and extension of the circumference of a previously acclimated family. Hence the experience of the kind in question, valuable as it is in the way of Medical Police, is comparatively worthless in a theory as to the Migrations of Mankind. Take a man from Caucasus to the Gold Coast, and he either dies or takes a fever But would he do so if his previous sojourn had been on the Gambia, his grandfather's on the Senegal, his ancestors in the tenth degree on the Nile, and that ancestor's ancestor's on the Jordan—thus going back till we reached the first remote patriarch of the migration on the Phasis? This is an experiment which no single generation can either make or observe; yet less than this is no experiment at all, no imitation of that particular operation of Nature which we are so curious to investigate.

What follows applies to Ethnology. The first result we get from our observations is a *classification*, *i. e.*, groups of individuals, families, tribes, nations, sub-varieties, varieties, and (according to some), of species connected by some common link, and united on some com-

mon principle. There is no want of groups of this kind; and many of them are so natural, as to be unsusceptible of improvement. Yet the nomenclature for their different divisions is undetermined, the values of many of them uncertain, and above all, the principle upon which they are formed is by no means uniform. Whilst some investigators classify mankind on *Zoological*, others do so on what may be called *Mineralogical*, principles. This difference will be somewhat fully illustrated.

In Africa, as is well known, a great portion of the population is black-skinned; and with this black skin other physical characteristics are generally found in conjunction. Thus the hair is either crisp or woolly, the nose depressed, and the lips thick. As we approach Asia these criteria decrease; the Arab being fairer, better-featured and straighter-haired than the Nubian, and the Persian more so than the Arab. In Hindostan, however, the color deepens; and by looking amongst the most moist and alluvial parts of the southern peninsula, we find skins as dark as those of Africa, and hair crisp rather than straight. Besides this, the fine oval contour and regular features of the high-cast Hindus of the North become scarce, whilst the lips get thick, the skin harsh, and the features coarse.

Further on—we come to the great Peninsula

which contains the kingdoms of Ava and Siam —the Indo-Chinese or Transgangetic Peninsula. In many parts of this the population blackens again; and in the long narrow peninsula of Malacca, a *large* proportion of the older population has been described as *blacks*. In the islands we find them again; so much so that the Spanish authorities call them *Negritos*, or *Little Negroes*. In New Guinea all is black; and in Australia and Van Diemen's Land it is blacker still. In Australia the hair is generally straight; but in the first and last-named countries it is frizzy, crisped, or curling. This connects them with the Negroes of Africa; and their color does so still more. At any rate, we talk of the Australian *Blacks*, just as the Spaniards do of the Philippine *Negritos*. Moral characteristics connect the Australian and the Negro, much in the same manner as the physical ones. Both, as compared with the European, are either really deficient in intellectual capacity, or (at least) have played an unimportant part in the history of the world. Thus, several populations have come under the class of *Blacks*. Is this classification natural?

It shall be illustrated further. On the extremities of each of the quarters of the world, we find populations that in many respects resemble each other. In Northern Asia and Eu-

rope, the Eskimo, Samoeid, and Laplander, tolerant of the cold of the Arctic Circle, are all characterized by a flatness of face, a lowness of stature, and a breadth of head. In some cases the contrast between them and their nearest neighbors to the south, in these respects, is remarkable. The Norwegian, who comes in contact with the Lap, is strong and well-made; so are many of the Red Indians who front the Eskimo.

At the Cape of Good Hope something of the same sort appears. The Hottentot of the southern extremity of Africa is undersized, small-limbed, and broad-faced; so much so, that most writers, in describing him, have said that, in his confirmation, the Mongolian type—to which the Eskimo belongs—Asiatic itself—reappears in Africa. And then his neighbor, the Kaffre, differs from him as the Finlander does from the Lap.

Mutatis mutandis, all this re-appears at Cape Horn, where the Patagonian changes suddenly to the Fuegian.

But we in Europe are favored; our limbs are well-formed and our skin fair. Be it so: yet there are writers who, seeing the extent to which the Islanders of the Pacific are favored also, and noting the degree to which European points of color, size, and capacity for improve-

ment, real or supposed, re-appear at the Antipodes, have thrown the Polynesian and the Englishman in one and the same class.

And so, perhaps, he is, if we are to judge by certain characteristics; if agreement in certain matters, wherein the intermediate populations differ, form the grounds upon which we make our groups, the Fuegians, Eskimo, and Hottentots form one class, and the Negroes and Australians another. But are these classes natural? That depends upon the questions to which the classification is subservient. If we wish to know how far moisture and coolness freshen the complexion; how far moisture and heat darken it; how far mountain altitudes affect the human frame; in other words, how far common external conditions develop common habits and common points of structure, nothing can be better than the groups in question.

But alter the problem: let us wish to know how certain areas were peopled; what population gave origin to some other; how the Americans reached America; whence the Britons came into England, or any questions connected with the migrations, affiliations, and origin of the varieties of our species, and groups of this kind are valueless. They tell us something—but not what we want to know; inasmuch as our question now concerns blood, descent, pedi-

gree, relationship. To tell an inquirer who wishes to deduce one population from another that certain distant tribes agree with the one under discussion in certain points of resemblance, is as irrelevant as to tell a lawyer in search of the next of kin to a client deceased, that though you know of no relations, you can find a man who is the very picture of him in person—a fact good enough in itself, but not to the purpose; except (of course) so far as the likeness itself suggests a relationship—which it may or may not do.

Classes formed irrespective of descent are classes on the *Mineralogical*, whilst classes formed with a view to the same are classes on the *Zoological*, principle. Which is wanted in the Natural History of Man? The first for *Anthropology*: the second for *Ethnology*.

But why the antagonism? Perhaps the two methods may coincide. The possibility of this has been foreshadowed. The family likeness may, perhaps, prove a family connection. True: at the same time each case must be tested on its own grounds. Hence, whether the African is to be grouped with the Australian, or whether the two classes are to be as far asunder in Ethnology as in Geography, depends upon the results of the special investigation of that particular connection—real or supposed. It is sufficient

to say that none of the instances quoted exhibit any such relationship; though many a theory—as erroneous as bold—has been started to account for it.

It is for Ethnology, then, that classification is most wanted—more than for Anthropology; even as it is for Zoology that we require orders and genera rather than for Physiology. This is based upon certain distinctive characters; some of which are of a physical, others of a moral sort. Each falls into divisions. There are moral and intellectual phænomena which prove nothing in the way of relationship, simply because they are the effects of a common grade of civilizational development. What would be easier than to group all the hunting, all the piscatory, or all the pastoral tribes together; and to exclude from these all who built cities, milked cows, sowed corn, or ploughed land? Common conditions determine common habits.

Again, much that seems at first glance definite, specific, and characteristic, loses its value as a test of ethnological affinity, when we examine the families in which it occurs. In distant countries, and in tribes far separated, superstition takes a common form, and creeds that arise independently of each other look as if they were deduced from a common origin. All this makes the facts in what may be called the

Natural History of the Arts or of Religion easy to collect, but difficult to appreciate: in many cases, indeed, we are taken up into the rare and elevated atmosphere of metaphysics. What if different modes of architecture, or sculpture, or varieties in the practice of such useful arts as weaving and ship-building, be attributed to the same principle that makes a sparrow's nest different from a hawk's, or a honey-bee's from a hornet's? What if there be different *instincts* in human art, as there is in the nidification of birds? Whatever may be the fact, it is clear that such a doctrine must modify the interpretation of it. The clue to these complications—and they form a Gordian knot which must be unravelled, and not cut—lies in the cautious induction from what we know to what we do not; from the undoubted differences admitted to exist within undoubtedly related populations, to the greater ones which distinguish more distantly connected groups.

This has been sufficient to indicate the existence of certain moral characters which are really no characters at all—at least in the way of proving descent or affiliation; and that physical ones of the same kind are equally numerous may be inferred from what has already been written.

It is these elements of uncertainty so profuse-

ly mixed up with almost all the other classes of ethnological facts, that give such a high value, as an instrument of investigation, to *Language;* inasmuch as, although two different families of mankind may agree in having skins of the same color, or hair of the same texture, without, thereby, being connected in the way of relationship, it is hard to conceive how they could agree in calling the same objects by the same name, without a community of origin, or else either direct or indirect intercourse. Affiliation or intercourse—one of the two—this community of language exhibits. One to the exclusion of the other it does *not* exhibit. If it did so, it would be of greater value than it is. Still it indicates one of the two; and either fact is worth looking for.

The value of language has been overrated; chiefly, of course, by the philologists. And it has been undervalued. The anatomists and archæologists, and, above all, the zoologists, have done this. The historian, too, has not known exactly how to appreciate it, when its phænomena come in collision with the direct testimony of authorities; the chief instrument in his own line of criticism.

It is overrated when we make the affinities of speech between two populations *absolute* evidence of connection in the way of relationship.

It is overrated when we talk of *tongues being immutable*, and of *languages never dying*. On the other hand, it is unduly disparaged when an inch or two of difference in stature, a difference in the taste in the fine arts, a modification in the religious belief, or a disproportion in the influence upon the affairs of the world, is set up as a mark of distinction between two tribes speaking one and the same tongue, and alike in other matters. Now, errors of each kind are common.

The permanence of language as a sign of origin must be determined, like every thing else of the same kind, by induction; and this tells us that both the loss and retention of a native tongue is illustrated by remarkable examples. It tells both ways. In St. Domingo we have Negroes speaking French; and this is a notable instance of the adoption of a foreign tongue. But the circumstances were peculiar. *One* tongue was not changed for another; since no Negro language predominated. The real fact was that of a *mixture of languages*—and this is next to no language at all. Hence, when French became the language of the Haytians, the usual obstacle of a previously existing common native tongue, pertinaciously and patriotically retained, was wanting. It superseded an indefinite and conflicting mass of Negro dialects, rather than any particular Negro language.

In the southern parts of Central America the ethnology is obscure, especially for the Republics of San Salvador, Nicaragua, and Costa Rica. Yet if we turn to Colonel Galindo's account of them, we find the specific statement that aborigines still exist, and that their language is the *Spanish;* not any native Indian dialect. As similar assertions respecting the extinction and replacement of original languages have frequently proved incorrect, let us assume this to be an over-statement—though I have no definite grounds for considering it one. Over-statement though it may be, it still shows the direction in which things are going; and that is towards the supremacy of a European tongue.

On the confines of Asia and Europe there is the nation, tribe or family of the Bashkirs. Their present tongue is the Turkish. It is believed, however, that originally it was the mother-tongue of the Majiars of Hungary.

Again, the present Bulgarian is akin to the Russian. Originally it was a Turk dialect.

Lastly—for I am illustrating, not exhausting, the subject—there died, in the year 1770, at Karczag in Hungary, an old man named Varro; the last man, in Europe, that knew even a few words of the language of his nation. Yet this nation was and is a great one; no less a one than that of the ancient Komanian Turks, some

of whom invaded Europe in the eleventh century, penetrated as far as Hungary, settled there as conquerors, and retained their language till the death of this same Varro. The rest of the nation remained in Asia; and the present occupants of the parts between the Caspian and the Aral are their descendants. Languages, then, may be lost; and one may be superseded by another.

The ancient Etruscans, as a separate substantive nation, are extinct: so is their language, which we know to have been peculiar. Yet the Etruscan blood still runs in the veins of the Florentine and other Italians.

On the other hand, the pertinacity with which language resists the attempts to supersede it is of no common kind. Without going to Siberia, or America, the great *habitats* of the broken and fragmentary families, we may find instances much nearer home! In the Isle of Man the native Manks still remains; though dominant Norsemen and dominant Anglo-Saxons have brought their great absorbent languages in collision with it. In Malta, the laborers speak Arabic -with Italian, with English, and with a Lingua Franca around them.

In the western extremities of the Pyrenees, a language neither French or Spanish is spoken, and has been spoken for centuries—possibly

millenniums. It was once the speech of the southern half of France, and of all Spain. This is the Basque of Biscay.

In contact with the Turk on one side, and the Greek and the Slavonic on the other, the Albanian of Albania still speaks his native Skipetar.

A reasonable philologist makes similarity of language strong—very strong—*primâ facie* evidence in favor of community of descent.

When does it imply this, and when does it merely denote commercial or social intercourse? We can measure the phænomena of languages and exhibit the results numerically. Thus the *per centage* of words common to two languages may be 1, 2, 3, 4—98, 99, or any intermediate number. But now comes the application of a maxim. *Ponderanda non numeranda.* We ask what *sort* of words coincide, as well as *how many?* When the names of such objects as *fire*, *water*, *sun*, *moon*, *star*, *hand*, *tooth*, *tongue*, *foot*, &c., agree, we draw an inference very different from the one which arises out of the presence of such words as *ennui*, *fashion*, *quadrille*, *violin*, &c. Common sense distinguishes the words which are likely to be borrowed from one language into another, from those which were originally common to the two.

There are a certain amount of French words

in English, *i. e.* of words borrowed from the French. I do not know the per centage, nor yet the time required for their introduction: and as I am illustrating the subject, rather than seeking specific results, this is unimportant. Prolong the time, and multiply the words; remembering that the former can be done indefinitely. Or, instead of doing this, increase the points of contact between the languages. What follows? We soon begin to think of a familiar set of illustrations; some classical and some vulgar—of the Delphic ship so often mended as to retain but an equivocal identity; of the Highlander's knife, with its two new blades and three new handles; of Sir John Cutler's silk-stockings degenerated into worsted by darnings. We are brought to the edge of a new question. We must tread slowly, accordingly.

In the English words call-*st*, call-*th* (call-*s*), and call-*ed*, we have two parts: the first being the root itself, the second a sign of *person*, or *tense*. The same is the case with the word father-*s*, son-*s*, &c.; except that the *-s* denotes *case*; and that it is attached to a substantive, instead of a verb. Again, in wis-*er* we have the sign of a comparative; in wis-*est* that of a superlative degree. All these are *inflexions*. If we choose, we may call them *inflexional* elements; and it is convenient to do so; since we can then analyse words and

contrast the different parts of them : *e. g.* in *call-s* the *call-* is radical, the *-s* inflexional.

Having become familiarized with this distinction, we may now take a word of French or German origin—say *fashion* or *waltz*. Each, of course, is foreign. Nevertheless, when introduced into English, it takes an English inflexion. Hence we say, *if I dress absurdly it is fashion*'s *fault;* also, *I am waltz*-ing, *I waltz*-ed, *he waltz*-es —and so on. In these particular words, then, the inflexional part has been English; even when the radical was foreign. This is no isolated fact. On the contrary, it is sufficiently common to be generalized so that the *grammatical* part of language has been accredited with a permanence which has been denied to the *glossarial* or *vocabular*. The one changes, the other is constant ; the one is immortal, the other fleeting ; the one form, the other matter.

Now it is imaginable that the glossarial and grammatical tests may be at variance. They would be so if all our English verbs came to be French, yet still retained their English inflexions in *-ed*, *-s*, *-ing*, &c. They would be so if all the verbs were like *fashion*, and all the substantives like *quadrille*. This is an extreme case ; still, it illustrates the question. Certain Hindu languages are said to have nine-tenths of the vocables common with a language called the Sanskrit—

but *none* of their inflexions: the latter being chiefly Tamul. What, then, is the language itself? This is a question which divides philologists. It illustrates, however, the difference between the two tests—the *grammatical* and the *glossarial*. Of these, it is safe to say that the former is the more constant.

Yet the philological method of investigation requires caution. Over and above the terms which one language borrows from another, and which denote intercourse rather than affinity, there are two other classes of little or no ethnological value.

1. *Coincidences may be merely accidental.* The likelihood of their being so is a part of the Doctrine of Chances. The mathematician may investigate this: the philologist merely finds the *data*. Neither has been done satisfactorily, though it was attempted by Dr. T. Young.

2. *Coincidences may have an* organic *connection*. No one would say that because two nations called the same bird by the name *cuckoo*, the term had been borrowed by either one from the other, or by both from a common source. The true reason would be plain enough. Two populations gave a name on imitative principles, and imitated the same object. *Son* and *brother*, *sister* and *daughter*—if these terms agree, the chances are that a philological affinity is at the

bottom of the agreement. But does the same apply to *papa* and *mama*, identical in English, Carib, and perhaps twenty other languages? No. They merely show that the infants of different countries begin with the same sounds.

Such—and each class is capable of great expansion—are the cases where philology requires caution. Another matter now suggests itself.

To be valid, a classification must be *real*; not *nominal* or *verbal*—not a mere book-maker's arrangement. Families must be in definite degrees of relationship. This, too, will bear illustration. A man wants a relation to leave his money to; he is an Englishman, and by relation means nothing more distant than a *third* cousin. It is nothing to him if, in Scotland, a *fifth* cousinship is recognised. He has not found the relation he wants; he has merely found a greater amount of latitude given to the term. Few oversights have done more harm than the neglect of this distinction. Twenty years ago the Sanskrit, Sclavonic, Greek-and-Latin, and Gothic languages formed a class. This class was called Indo-Germanic. Its western limits were in Germany; its eastern in Hindostan. The Celtic of Wales, Cornwall, Brittany, Ireland, Scotland, and the Isle of Man was not included in it. Neither was it included in any other group. It was anywhere or nowhere—in any degree of isolation. Dr. Prichard under-

took to fix it. He did so—well and successfully. He showed that, so far from being isolated, it was connected with the Greek, German, and Sclavonic by a connection with the Sanskrit, or (changing the expression) with the Sanskrit through the Sclavonic, German, and Greek—any or all. The mother-tongue from which all these broke was supposed to be in Asia. Dr. Prichard's work was entitled the "Eastern Origin of the Celtic Nations." Did this make the Celtic Indo-Germanic? It was supposed to do so. Nay, more—it altered the name of the class; which was now called, as it has been since, Indo-European—inconveniently. A relationship was mistaken for *the* relationship. The previous tongues were (say) second cousins. The Celtic was a fourth or fifth. What was the result? Not that a new second cousin was found, but that the family circle was enlarged.

What follows? Dr. Prichard's fixation of the Celtic as a member of even the same *clan* with the German, &c. was an addition to ethnographical philology that many inferior investigators strove to rival; and it came to be current belief —acted on if not avowed—that tongues as like the Celtic as the Celtic was to the German were Indo-European also. This bid fair to inundate the class—to make it prove too much—to render it no class at all. The Albanian, Basque, Etrus-

can, Lap, and others followed. The outlier of the group once created served as a nucleus for fresh accumulations. A strange language of Caucasus —the Irôn or Ossetic—was placed by Klaproth as Indo-Germanic; and that upon reasonable grounds, considering the unsettled state of criticism. Meanwhile, the Georgian, another tongue of those same mysterious mountains, wants placing. It has undoubted Ossetic—or Irôn—affinities. But the Ossetic—or Irôn—is Indo-European. So, therefore, is the Georgian. This is a great feat; since the Caucasian tongues and the Caucasian skulls now agree, both having their affinities with Europe—as they ought to have. But what if both the Irôn and Georgian are half Chinese, or Tibetan, *i. e.* are all but monosyllabic languages both in grammar and vocables? If such be the case, the term "Indo-European" wants revising; and not only that—the principles on which terms are fixed and classes created want revising also. At the same time, the "Eastern Origin of Celtic Nations" contains the most definite addition to philology that the present century has produced; and the proper compliment to it is Mr. Garnett's review of it in the "Quarterly;" the first of a series of masterly and unsurpassed specimens of inductive philology applied to the investigation of the true nature of the inflexions of the Verb. But this is episodical.

The next instrument of ethnological criticism is to be found in the phænomena themselves of the disperson and distribution of our species.

First, as to its universality. In this respect we must look minutely before we shall find places where Man is *not*. These, if we find them at all, will come under one of two conditions: the climate will be extreme, or the isolation excessive. For instances of the first, we take the Poles; and, as far as the Antarctic Circle is concerned, we find no inhabitants in the ice-bound regions—few and far between—of its neighborhood; none south of 55° S. lat., or the extremity of the Tierra del Fuego. This, however, *is* peopled. We must remember, however, that in the Southern Ocean such regions as New South Shetland and Victoria Land, are isolated as well as cold and frozen.

The *North* Pole, however, must be approached within 25° before we lose sight of Man, or find him excluded from even a permanent habitation. Spitzbergen is beyond the limits of human occupancy. Nova Zembla, when first discovered, was also uninhabited. So was Iceland. Here, however, it was the isolation of the *island* that made it so. A hardy stock of men, nearly related to ourselves, have occupied it since the ninth century; and *con-*

tinental Greenland is peopled as far as the 75th degree—though, perhaps, only as a summer residence.

Far to the east of Nova Zembla and opposite to the country of the Yukahiri—a hardy people on the rivers Kolyma and Indijirka, and within the Arctic Circle—lies the island of New Siberia. I find from Wrangell's Travels in Siberia, that certain expatriated Yukahiri are believed to have fled thither. Have they lived or died? Have they reached the island? In case they have done so, and kept body and soul together, New Siberia is probably the most northern spot of the inhabited world.

How *cold* a country must be in order to remain empty of men, we have seen. Such localities are but few. None are too *hot*—unless, indeed, we believe the centre of Equatorial Africa to be a solitude.

In South America there is a great blank in the Maps. For many degrees on each side of the Upper Amazons lies a vast tract—said to be a jungle—and marked *Sirionos*, the name of a frontier population. Yet the *Sirionos* are not, for one moment, supposed to fill up the vast hiatus. At the same time, there are few, or none, besides. Is this tract a drear unhumanized waste? It is said to be so—to be wet, woody, and oppressively malarious. Yet, this

merely means that there is a forest and a swamp of a certain magnitude, and of a certain degree of impenetrability.

Other such areas are unexplored—yet we presume them to be occupied; though ever so thinly: *c. g.* the interiors of New Guniea and Australia.

That Greenland was known to the early Icelanders is well known. And that it was occupied when so first known is also certain. One of the geographical localities mentioned in an old Saga, has an Eskimo word for one of its elements—*Utiburs-fiörth=the fiörth of the isthmus; Utiburk* in Eskimo meaning *isthmus.*

Of the islands originally uninhabited, those which are, at one and the same time, large and near continents, are Madeira and Iceland—the former being a lonely wood. The Canaries, though smaller and more isolated, have been occupied by the remarkable family of the Guanches. Add to these, Ascension, St. Helena, the Galapagos, Kerguelen's Island, and a few others.

Easter Island, a speck in the vast Pacific, and more than half way between Asia and America, exhibited both inhabitants and ruins to its first discoverers.

Such is the *horizontal* distribution of Man; *i. e.* his distribution according to the degrees of

latitude. What other animal has such a range? What species? What genus or order? Contrast with this the localized habitats of the Orang-utan, and the Chimpanzee as species; of the Apes as genera; of the Marsupialia as orders.

The *vertical* distribution is as wide. By *vertical* I mean elevation above the level of the sea. On the high table-land of Pamer, we have the Kerghiz; summer visitants at least, where the *Yak* alone, among domesticated animals, lives and breathes in the rarefied atmosphere. The town of Quito is more than 10,000 feet above the sea; Walcheren is, perphaps, below the level of it.

Who expects uniformity of physiognomy or frame with such a distribution?

The size of ethnological areas.—Comparatively speaking, Europe is pretty equally divided amongst the European families. The Slavonic populations of Bohemia, Silesia, Poland, Servia, and Russia may, perhaps, have more than their due—still the French, Italians, Spaniards, Portuguese, and Wallachians, all speaking languages of classical origin, have their share; and so has our own Germanic or Gothic family of English, Dutch, Frisians, Bavarians, and Scandinavians. Nevertheless, there are a few families as limited in geographical area as

subordinate in political importance. There are the Escaldunac, or Basques,—originally the occupants of all Spain and half France, now pent up in a corner of the Pyrenees—the Welsh of the Iberic Peninsula. There are, also, the Skipetar, or Albanians, wedged in between Greece, Turkey and Dalmatia. Nevertheless, the respective areas of the European families are pretty equally distributed; and the land of Europe is like a lottery, wherein all the prizes are of an appreciable value.

The comparison with Asia verifies this. In immediate contact with the vast Turkish population centered in Independent Tartary, but spread over an area reaching, more or less continuously, from Africa to the Icy Sea, (an area larger than the whole of Europe), come the tribes of Caucasus—Georgians, Circassians, Lesgians, Mizjeji, and Iròn; five well-defined groups, each falling into subordinate divisions, and some of them into subdivisions. The language of Constantinople is understood at the Lena. In the mountain range between the Caspian and the Black Sea, the mutually unintelligible languages are at least fifteen—perhaps more, certainly not fewer. Now, the extent of land covered by the Turk family, shows the size to which an ethnological area may attain; whilst the multiplicity of mutually unintelligible tongues

of Caucasus, shows how closely families may be packed. Their geographical juxtaposition gives prominence to the contrast.

At the first view, this contrast seems remarkable. So far from being so, it is of continual occurrence. In China, the language is one and indivisible; on its south-western frontier the tongues are counted by the dozen—just as if in Yorkshire, there were but one provincial dialect throughout; two in Lincolnshire; and twenty in Rutland.

The same contrast re-appears in North America. In Canada and the Northern States, the Algonkin area is measured by the degrees of latitude and longitude; in Louisiana and Alabama by the mile.

The same in South America. One tongue—the Guarani—covers half the continent. Elsewhere, a tenth part of it contains a score.

The same in Southern Africa. From the Line to the neighborhood of the Cape, all is Kaffre. Between the Gambia and the Gaboon there are more than twenty different divisions.

The same in the North. The Berbers reach from the Valley of the Nile to the Canaries, and from the Mediterranean to the parts about Borneo. In Borneo, there are said to be thirty different languages.

Such are areas in size, and in relation to

each other; like the bishopries and curacies of our church, large and small, with a difficulty in ascertaining the average. However, the simple epithets, *great* and *small*, are suggestive; since the former implies an *encroaching*, the latter *receding* population.

A distribution over continents is one thing; a distribution over islands another. The first is easiest made when the world is young, and when the previous occupants create no obstacles. The second implies maritime skill and enterprise, and maritime skill improves with the experience of mankind. One of the greatest facts of ethnological distribution and dispersion belongs to this class. All the islands of the Pacific are peopled by the members of one stock, or family—the Polynesian. These we find as far north as the Sandwich Islands, as far south as New Zealand, and in Easter Island, half-way between Asia and America. So much for the *dispersion*. But this is not all; the *distribution* is as remarkable. Madagascar is an African rather than an Asiatic island, within easy sail of Africa; the exact island for an African population. Yet, ethnologically, it is Asiatic—the same family which we find in Sumatra, Borneo, the Moluccas, the Mariannes, the Carolines, and Polynesia being Malagasi also.

Contrast between contiguous populations.—

Ethnological resemblance by no means coincides with geographical contiguity. The general character of the circumpolar families of the Arctic Circle is that of the Laplander, the Samoeid, and the Eskimo. Yet the zone of population that encircles the inhospitable shores of the Polar sea is not exclusively either Lap or Samoeid—nor yet Eskimo. In Europe, the Laplander finds a contrast on each side. There is the Norwegian on the west; the Finlander on the east. We can explain this. The former is but a recent occupant; not a natural, but an intruder. This we infer from the southern distribution of the other members of his family, who are Danish, German, Dutch, English, and American. For the same reason the Icelander differs from the Greenlander. The Finlander, though more closely allied to the Lap than the Norwegian—belonging to the same great Ugrian family of mankind—is still a southern member of his family; a family whose continuation extends to the Lower Volga, and prolongations of which are found in Hungary. East of the Finlander, the Russian displaces the typically circumpolar Samoeid; whilst at the mouth of the Lena we have the Yakuts—Turk in blood and tongue, and, to a certain extent, in form also.

In America the circumpolar population is

generally Eskimo. Yet, at one point, we find even the verge of the Arctic shore occupied by a population of tall, fine-looking athletes, six feet high, well-made, and handsome in countenance. These are the Digothi Indians, called also Loucheux. Their locality is the mouth of the McKenzie River; but their language shows that their origin is further south, *i. e.*, that they are Koluches within the Eskimo area.

In Southern Africa we have the Hottentot in geographical proximity to the Kaffre, yet the contrast between the two is considerable. Similar examples are numerous. What do they denote? Generally, but not always, they denote encroachment and displacement; encroachment which tells us which of the two families has been the stronger, and displacement which has the following effect. It obliterates those intermediate and transitional forms which connect varieties, and so brings the more extreme cases of difference in geographical contact, and in ethnological contrast; hence *encroachment*, *displacement*, and the *obliteration of transitional forms* are terms required for the full application of the phænomena of distribution as an instrument of ethnological criticism.

Continuity and isolation.—In Siberia there are two isolated populations, the Yakuts on the Lower Lena, and the Soiot on the Upper Yene-

sey. The former, as aforesaid, are Turk; but they are surroundud by nations other than Turk. They are cut off from the rest of the stock.

The Soiot in like manner are surrounded by strange populations. Their true relations are the Samoeids of the Icy Sea; but between these two branches of the stock there is a heterogeneous population of Turks and Yeneseians—so-called.

The great Iroquois family of America is separated into two parts—one northern and one southern. Between these lie certain members of the Algonkin class. Like the Soiot, and the Northern Samoeids, the two branches of the Iroquois are separated.

The Majiars of Hungary are wholly inclosed by non-Hungarian populations; and their nearest kinsmen are the Voguls of the Uralian Mountains, far to the north-east of Moscow.

This shows that ethnological areas may be either uninterrupted or interrupted; continuous or discontinuous; unkroken or with isolated fragments; and a little consideration will show, that *wherever there is isolation there has been displacement*. Whether the land has risen, or the sea encroached, is another question. We know why the Majiars stand separate from the other Ugrian nations. They intruded themselves into Europe within the historical period, cutting their way with the sword; and the parts between them

and their next of kin were never more Majiar than they are at the present moment.

But we know no such thing concerning the Iroquois; and we infer something quite the contrary. We believe that they once held all the country that now separates their two branches, and a great deal more beside. But the Algonkins encroached; partially dispossessing, and partially leaving them in occupation.

In either case, however, there has been *displacement;* and the displacement is the inference from the *discontinuity.*

But we must remember that true discontinuity can exist in *continents* only. The populations of two *islands* may agree, whilst that of a whole archipelago lying between them may differ. Yet this is discontinuity; since the sea is an unbroken chain, and the intervening obstacle can be sailed round, instead of crossed. The nearest way from the continent of Asia to the Tahitian archipelago—the nearest part of Polynesia—is *via* New Guinea, New Ireland, and the New Hebrides. All these islands, however, are inhabited by a different division of the Oceanic population. Does this indicate displacement? No! it merely suggests the Philippines, the Pelews, the Carolines, the Ralik and Radak groups, and the Navigators' Isles, as the route; and such it almost certainly was.

CHAPTER IV.

Details of distribution—their conventional character—convergence from the circumference to the centre—Fuegians, Patagonian, Pampa, and Chaco Indians—Peruvians—D'Orbigny's characters—other South American Indians—of the Missions—of Guiana—of Venezuela—Guarani—Caribs—Central America—Mexican civilization no isolated phænomenon—North American Indians—Eskimo—apparent objections to their connection with the Americans and Asiatics—Tasmanians—Australians—Papuá—Polynesians—Micronesians—Malagasi—Hottentots—Kaffres—Negroes—Berbers—Abyssinians—Copts—the Semitic family—Primary and secondary migration.

If the inhabited world were one large circular island; if its population were admitted to have been diffused over its surface from some single point; and if that single point were at one and the same time unascertained, and requiring investigation, what would be the method of our inquiries? I suppose that both history and tradition are silent, and that the absence of other *data* of the same kind, force us upon the general probabilities of the case, and a large amount of *à priori* argument.

We should ask what point would give us the existing phænomena with the least amount of

migration; and we should ask this upon the simple principle of not multiplying causes unnecessarily. The answer would be—*the centre*. From the centre we can people the parts about the circumference, without making any line of migration longer than half a diameter; and without supposing any one out of such numerous lines to be longer than the other. This last is the chief point—the point which more especially fixes us to the centre as a hypothetical birthplace; since, the moment we say that any part of the circumference was reached by a shorter or longer line than any other, we make a specific assertion, requiring specific arguments to support it. These may, or may not exist. Until, however, they have been brought forward, we apply the rule *de non apparentibus*, &c., and keep to our conventional and provisional point in the centre—remembering, of course, its provisional and conventional character, and recognising its existence only as long as the search for something more real and definite continues.

In the earth as it is, we can do something of the same kind; taking six extreme points as our starting-places, and investigating the extent to which they *converge*. These six points are the following:

1. Tierra del Fuego.
2. Tasmania (Van Diemen's Land.)

3. Easter Island—the furthest extremity of Polynesia.

4. The Cape of Good Hope, or the country of the Saabs (Hottentots).

5. Lapland.

6. Ireland.

From these we work through America, Australia, Polynesia, Africa, and Europe, to Asia—some part of which gives us our *conventional, provisional, and hypothetical centre.*

I. *From Tierra del Fuego to the north-eastern parts of Asia.*—The Fuegians of the island have so rarely been separated from the Patagonians of the continent that there are no recognised elements of uncertainty in this quarter, distant as it is. Maritime habits connect them with their northern neighbors on the west; and that long labyrinth of archipelagoes which runs up to the southern border of Chili is equally Fuegian and Patagonian. Here we are reminded of the habits of some of the Malay tribes, under a very different sky, and amongst the islets about Sincapore—of the Bajows, or sea-gipsies, boatmen whose home is on the water, and as unfixed as that element; wanderers from one group to another; fishermen rather than traders; not strong-handed enough to be pirates and not industrious enough to be cultivators. Such skill as the Fuegian shows at all, he shows

in his canoe, his paddles, his spears, his bow, his slings, and his domestic architecture. All are rude—the bow-strings are made exclusively of the sinews of animals, his arrows headed with stone. Of wood there is little, and of metal less; and, low as is the latitude, the dress, or undress, is said to make a nearer approach to absolute nakedness than is to be found in many of the intertropical countries.

In size they fall short of the continental Patagonians; in color and physical conformation they approach them very closely. The same broad and flattened face occurs in both, reminding some writers of the Eskimo, others of the Chinuk. Their language is certainly referable to the Patagonian class, though, probably, unintelligible to a Patagonian.

Within the island itself there are differences; degrees of discomfort; and degrees in its effects upon the bodily frame. At the eastern extremity* the population wore the skins of land-animals, and looked like hunters rather than fishers and sealers. Otherwise, as a general rule, the Fuegians are *boatmen*.

Not so their nearest kinsmen. They are all horsemen; and in their more northern localities the most formidable ones in the world—Patagonians of considerable but exaggerated stature,

* Pickering, Races of Men, p. 19.

Pampa Indians between Buenos Ayres and the southern Andes, and, higher up, the Chaco Indians of the water-system of the river Plata. To these must be added two other families—one on the Pacific and one on the Atlantic—the Araucanians of Chili, and the Charruas of the lower La Plata.

Except in the impracticable heights of the Andes of Chili, and, as suggested above, in the island of Tierra del Fuego, the same equestrian habits characterize all these populations; and, one and all, the same indomitable and savage independence. Of the Chaco Indians, the Tonocote are partially settled, and imperfectly Christianized; but the Abiponians—very Centaurs in their passionate equestrianism—the Mbocobis, the Mataguayos, and others, are the dread of the Spaniards at the present moment. The resistance of the Araucanians of Chili, has given an epic* to the country of their conquerors.

Of the Charruas, every man was a warrior; self-relying, strong and cruel; with his hand against the Spaniard, and with his hand against the other aborigines. Many of these they exterminated, and too proud to enter into confederation, always fought single-handed. In 1831, the President of Uraguay ordered their total

* The Araucana of Ercilla.

destruction, and they were cut down, root and branch; a few survivors only remaining.

Minus the Fuegians, this division is preeminently natural; yet the Fuegians cannot be disconnected from it. As a proof of the physical differences being small, I will add the description of a naturalist—D'Orbigny—who separates them. They evidently lie within a very small compass.

a. Araucanian branch of the Ando-Peruvians.—Color light olive, form massive, trunk somewhat disproportionately long, face nearly circular, nose short and flat, lips thin, physiognomy sombre, cold.

b. Pampa branch of the Pampa Indians.—Color deep olive brown or *maroon*, form Herculean, forehead vaulted, face large, flat, oblong, nose short, nostrils large, mouth wide, lips large, eyes horizontal, physiognomy cold, often savage.

D'Orbigny is a writer by no means inclined to undervalue differences. Nevertheless he places the *Peruvians* and the Araucanians in the same primary division. This shows that, if other characters connect them, there is nothing very conclusive in the way of physiognomy against their relationship. I think that certain other characters *do* connect them—language most especially. At the same time, there is no

denying important contrasts. The civilization of Peru has no analogue beyond the Tropics; and if we are to consider this as a phænomenon *per se*, as the result of an instinct as different from those of the Charrua as the architectual impulses of the bee and the hornet, broad and trenchant must be our lines of demarcation. Yet no such lines can be drawn. Undoubted members of the Quichua stock of the Inca Peruvians (architects and conquerors, as that particular branch was) are but ordinary Indians—like the Aymaras. Nay, the modern Peruvians, when contrasted with their ancestors, are in the same category. The present occupants of the parts about Titicaca and Tiaguanaca wonder at the ruins around them, and confess their inability to rival them, just as a modern Greek thinks of the Phidian Jupiter and despairs. Again, the gap is accounted for—since most of those intervening populations which may have exhibited transitional characters have become either extinct, or denationalized. Between the Peruvians and Araucanians, the Atacamas and Changos are the only remaining populations—under 10,000 in number, and but little known.

Nevertheless, an unequivocally allied population of the Peruvian stock takes us from 28° S. lat. to the Equator. Its unity within itself is undoubted; and its contrast with the next near-

est families is no greater than the displacements which have taken place around, and our own ignorance in respect to parts in contact with it.

Of all the populations of the world, the Peruvian is the most *vertical* in its direction. Its line is due north and south; its breadth but narrow. The Pacific is at one side, and the Andes at the other. One is well-nigh as definite a limit as the other. When we cross the Cordilleras, the Peruvian type has changed.

The Peruvians lie between the Tropics. They cross the Equator. One of their Republics—Ecuador—even takes its name from the meridian. But they are also mountaineers; and, though their sun is that of Africa, their soil is that of the Himalaya. Hence, their locality presents a conflict, balance, or antogonism of climatologic influences; and the degrees of altitude are opposed to those of latitude.

Again, *their line of migration is at a right angle with their Equatorial parallel*—that is, if we assume them to have come from North America. The bearing of this is as follows:—The town of Quito is about as far from Mexico due north, as it is from French Guiana due west. Now if we suppose the line of migration to have reached Peru from the latter country, the great-great-ancestors of the Peruvians would be peo-

ple as inter-tropical as themselves, and the influences of climate would coincide with the influences of descent; whereas if it were North America from which they originated, their ancestors of a corresponding generation would represent the effect of a climate twenty-five degrees further north—these, in their turn, being descended from the occupants of the temperate, and they from those of the frigid zone. The full import of the relation of the lines of migration—real or hypothetical—to the degrees of latitude has yet to be duly appreciated. To say that the latter go for nothing because the inter-tropical Indian of South America is not as black as the negro, is to compare things that resemble each other in one particular only.

It is Peru where the ancient sepulchral remains have complicated ethnology. The skulls from ancient burial-places are preternaturally flattened. Consider this natural; and you have a fair reason for the recognition of a fresh species of the genus *Homo*. But is it legitimate to do so? I think not. That the practice of flattening the head of infants was a custom once as rife and common in Peru as it is in many other parts of both North and South America at the present day, is well known. Then why not account for the ancient flattening thus? I hold that the writers who hesitate to do this should undertake

the difficult task of proving a negative: otherwise they multiply causes unnecessarily.

Two stocks of vast magnitude take up so large a proportion of South America, that though they are not in immediate geographical contact with the Peruvians, they require to be mentioned next in order here. They are mentioned now in order to enable us to treat of *other* and *smaller* families. These two great stocks are the Guarani and the Carib; whilst the classes immediately under notice are—

The remaining South Americans who are neither Carib nor Guarani.—This division is artificial, being based upon a negative character; and it is geographical rather than ethnological. The first branch of it is that which D'Orbigny calls *Antisian*, and which he connects at once with the Peruvians Proper; both being members of that primary division to which he referred the Araucanians—the Araucanians being the third branch of the *Ando*-Peruvians; the two others being the—

a. Peruvian branch.—Color deep olive-brown; form massive; trunk long in proportion to the limbs; forehead retreating; nose aquiline; mouth large; physiognomy sombre:—Aymara and Quichua Peruvians.

b. Antisian branch.—Color varying from a deep olive to nearly white; form not massive;

forehead not retreating; physiognomy lively, mild :—Yuracarés, Mocéténès, Tacanas, Maropas, and Apolistas.

The Yuracarés, Mocéténès, Tacanas, Maropas, and Apolistas, are *Antisian;* and their locality is the eastern slopes of the Andes,* between 15° and 18° S. lat. Here they dwell in a thickly wooded country, full of mountain streams, and their corresponding valleys. One portion of them at least is so much lighter-skinned than the Peruvians, as to have taken its name from its color— *Yurak-kare=white man.*

To the west of the Antisians lie the Indians of the *Missions* of Chiquito and Moxos, so called because they have been settled and Christianized. The physical characters of these also are D'Orbigny's. The division, however, he places in the same group with the Patagonians.

a. Chiquito branch.—Color light olive; form moderately robust; mouth moderate; lips thin; features delicate; physiognomy lively :—Indians of the Mission of Chiquitos.

b. Moxos branch.—Form robust; lips thickish; eyes not *bridés*; physiognomy mild :—Indians of the Mission of Moxos.

And now we are on the great water-system of the Amazons; with the united effects of heat and moisture. They are not the same as in Africa. There are no negroes here. The skin

* D'Orbigny, Homme Américain.

is in some cases yellow rather than brown; in some it has a red tinge. The stature, too, is low; not like that of the negro, tall and bulky. It is evident that heat is not everything; and that it may have an inter-tropical amount of intensity without necessarily affecting the color beyond a certain degree. As to differences between the physical conditions of Brazil and Guiana on one side, and those of the countries we have been considering on the other, they are important. The condition of both the soil and climate determines to agriculture. This gives us a contrast to the Pampa Indians; whilst, in respect to the Peruvians, there is no longer the Andes with its concomitants; no longer the variety of climate within the same latitude, the abundance of building materials, and the absence of rivers. Boatmen, cultivators, and foresters—*i. e.* hunters of the wood rather than of the open praire—such are the families in question. Into groups of *small* classificational value they divide and subdivide indefinitely more than the few investigators have suggested; indeed, D'Orbigny throws them all into one class.

The tribes of the Orinoco form the last section of Indians, which are neither Guarani nor Caribs; and this brief notice of their existence clears the ground for the somewhat fuller account of the next two families.

The Guarani alone cover more land than

all the other tribes between the Amazons, the Andes, and the La Plata put together; but it is not certain that their area is continuous. In the Bolivian province of Santa Cruz de la Sierra, and in contact with the Indians of the Missions and the Chaco, we find the Chiriguanos and Guarayos—and these are Guarani. Then as far north as the equator, and as far as the river Napo on the Peruvian frontier, we find the flat-head Omaguas, the fluviatile mariners (so to say) of the Amazons; and these are Guarani as well.

The bulk, however, of the stock is Brazilian; indeed, *Brazilian* and *Guarani* have been sometimes used as synonyms. There are, however, other Guarani in Buenos Ayres; there are Guarani on the boundaries of Guiana; and there are Guarani at the foot of the Andes. But amidst the great sea of the Guarani populations, fragments of other families stand out like islands; and this makes it likely that the family in question has been aggressive and intrusive, has effected displacements, and has superseded a number of transitional varieties.

The Caribs approach, without equalling, the Guarani, in the magnitude of their area. This lies mostly in Guiana and Venezuela. The chief population of Trinidad *is*, that of the Antilles *was*, Carib. The Caribs, the Inca Peruvians, the Pampa horsemen, and the Fuegian boatmen repre-

sent the four extremes of the South American populations.

In some of the Brazilian tribes, the oblique eye of the Chinese and Mongolians occurs.

In order to show the extent to which a multiplicity of small families may not only exist, but exist in the neighborhood of great ethnological areas, I will enumerate those tribes of the Missions, Brazil, Guiana, and Venezuela, for which vocabularies have been examined, and whereof the languages are believed, either from the comparison of specimens, or on the strength of direct evidence, to be mutually unintelligible; premising that differences are more likely to be exaggerated than undervalued, and that the number of tribes not known in respect to their languages is probably as great again as that of the known ones.

A. Between the Andes, the Missions, and the 15° and 17° S. L. come the Yurakares; whose language is said to differ from that of the Mocéténès, Tacana, and Apolistas, as much as these differ amongst themselves.

B. In the Missions come—1. The Moxos. 2. Movima. 3. The Cayuvava. 4. The Sapiboconi—these belonging to Moxos. In Chiquitos are—1. The Covareca. 2. The Curumainaca. 3. The Curavi. 4. The Curucaneca. 5. The Corabeca. 6. The Samucu.

C. In Brazil, the tribes, other than Guarani, of which I have seen vocabularies representing mutually unintelligible tongues, are—

1. The Botocudo, fiercest of cannibals.

2. The Goitaca, known to the Portuguese as *Coroados* or *Tonsured.*

3. The Camacan with several dialects.

4. The Kiriri and Sabuja.

5. The Timbira.

6. The Pareci, the predominant population of the Mata Grosso.

7. The Mundrucu, on the southern bank of the Amazons, between the rivers Mauhé and Tabajos.

8. The Muru.

9, 10, 11. The Yamco, Maina, and Chimano, between the Madera and the Ucayale.

12. The Coretu, the only one out of forty tribes known to us by a vocabulary, for the parts between the left bank of the Amazons and the right of the Rio Negro.

D. Of French, Spanish, and Dutch Guiana I know but little. Upon *British* Guiana a bright light has been thrown by the researches of Sir R. Schomburgk. Here, besides numerous well-marked divisions of the Carib group, we have—

1. The Warows, aboreal boatmen—boatmen because they occupy the Delta of the Orinoco,

and the low coast of Northern Guiana—and arboreal because the floods drive them up into the trees for a lodging. In physical form the Warows are like their neighbors; but their language has been reduced to no class, and their peculiar habits place them in strong contrast with most other South Americans. They are the Marshmen of a country which is at once a delta and a forest.

2. The Taruma.

3. The Wapisiana, with the Atúrai, Daúri, and Amaripas as extinct, or nearly extinct, sections of them—themselves only a population of four hundred.

E. Venezuela means the water-system of Orinoco, and here we have the mutually unintelligible tongues of—

1. *The Salivi*, of which the Aturi are a division—the Aturi known from Humboldt's description of their great sepulchral cavern on the cataracts of the Orinoco; where more than six hundred bodies were preserved in woven bags or baskets—some mummies, some skeletons, some varnished with odoriferous resins, some painted with arnotto, some bleached white, some naked. This custom re-appears in parts of Guiana. The Salivi have undergone great displacement; since there is good reason for believing that their language was once spoken in Trinidad.

2. *The Maypures.*

3. *The Achagua.*

4. *The Yarura*, to which the *Betoi* is allied; and possbly—

The Ottomaka.—These are the *dirt-eaters.* They fill their stomachs with an unctuous clay, found in their country; and that, whether food of a better sort be abundant or deficient.

There is plenty of difference here; still where there is difference in some points, there is so often agreement in others, that no very decided difficulties are currently recognized as lying against the doctrine of the South Americans being specifically connected. When such occur, they are generally inferences from either the superior civilization of the ancient Peruvians, or from the peculiarity of their skulls. The latter has been considered. The former seems to be nothing different in kind from that of several other American families—the Muysca of New Grenada, the Mexican, and the Maya further northwards. But this may prove too much; since it may merely be a reason for isolating the Mexicans, &c. Be it so. The question can stand over for the present.

Something has now been seen of two classes of phænomena which will appear and re-appear in the sequel—viz. the great difference in the physical conditions of such areas as the Fue-

gian, the Pampa, the Peruvian, and the Warows, and the contrast between the geographical extension of such vast groups as the Guarani, and small families like the Wapisiana, the Yurakares, and more than twenty others.

There is a great gap between South and Central America; nor is it safe to say that the line of the Andes (or the Isthmus of Darien) gives the only line of migration. The islands that connect Florida and the Caraccas must be remembered also.

The natives of New Grenada are but imperfectly known. In Veragua a few small tribes have been described. In Costa Rica there are still Indians—but they speak, either wholly or generally, Spanish. The same is, probably, the case in Nicaragua. The Moskito Indians are dashed with both negro and white blood, and are Anglicized in respect to their civilization—such as it is. Of the West Indian Islanders none remain but the dark-colored Caribs of St. Vincents. In Guatimala, Peruvianism re-appears; and architectural remains testify an industrial development—agriculture, and life in towns. The intertropical Andes have an Art of their own; essentially the same in Mexico and Peru; seen to the best advantage in those two countries, yet by no means wanting in the intermediate districts: remarkable in many respects,

but not more remarkable than the existence of three climates under one degree of latitude.

Mexico, like Peru, has been isolated—and that on the same principle. Yet the Ægyptians of the New World cannot be shown to have exclusively belonged to any one branch of its population. In Guatimala and Yucatan—where the ruins are not inferior to those of the Astek* country—the language is the Maya, and it is as unreasonable to suppose that the Asteks built these, as to attribute the Astek ruins to Mayas. It is an illegitimate assumption to argue that, because certain buildings were contained within the empire of Montezuma, they were therefore Astek in origin or design. More than twenty other nations occupied that vast kingdom; and in most parts of it, *where stone is abundant*, we find architectural remains.

Architecture, cities, and the consolidation of empire which they determine, keep along the line of the Andes. They also stand in an evident *ratio* to the agricultural conditions of the soil and climate. The Chaco and Pampa habits which stood so much in contrast with the industrial civilization of Peru, and so coincided

* Astek means the Mexicans of the Valley of Mexico who spoke the Astek language. *Mexican*, as applied to the kingdom conquered by Cortez, is a political rather than an ethnological term.

with the open prairie character of the country, re-appear in Texas. They increase in the great valley of the Mississippi. Nevertheless the Indians of Florida, the Carolinas, Tennessee, Kentucky, Virginia, and the old *forests* were partially agricultural. They were also capable of political consolidation. Powhattan, in Virginia, ruled over kings and sub-kings even as Montezuma did. Picture-writing—so-called—of which much has been said as a Mexican characteristic, is being found every day to be commoner and commoner amongst the Indians of the United States and Canada.

In an alluvial soil the barrow replaces the pyramid. The vast sepulchral mounds of the Valley of the Mississippi are the subjects of one of the valuable works* of the present time.

The Natchez, known to the novelist from the romance of Chateaubriand, are known to the ethnologist as preëminent amongst the Indians of the Mississippi for their Mexican characteristics. They flattened the head, worshipped the sun, kept up an undying fire, recognized a system of caste, and sacrificed human victims. Yet to identify them with the Asteks, to assume even any extraordinary intercourse, would be unsafe. Their traditions, indeed, suggest the

* Smithsonian Contributions to Knowledge, vol. i.

idea of a migration; but their language contradicts their traditions. They are simply what the other natives of Florida were. I see in the accounts of the early Appalachians little but Mexicans and Peruvians *minus* their metals, and gems, and mountains.

The other generalities of North America are those of Brazil, Peru, and Patagonia repeated. The Algonkins have an era like the Guarani, their coast-line only extending from Labrador to Cape Hatteras. The Iroquois of New York and the Carolinas—a broken and discontinuous population—indicate encroachment and displacement; they once, however, covered perhaps as much space as the Caribs. The Sioux represent the Chaco and Pampa tribes. Their country is a hunting-ground, with its relations to the northern Tropic and the Arctic Circle, precisely those of the Chaco and Pampas to the Southern and Antarctic.

The western side of the Rocky Mountains is more Mexican than the eastern; just as Chili is more Peruvian than Brazil.

I believe that if the Pacific coast of America had been the one first discovered and fullest described, so that Russian America, New Caledonia, Queen Charlotte's Archipelago, and Nutka Sound, had been as well known as we know Canada and New Brunswick, there would never

have been any doubts or difficulties as to the origin of the so-called Red Indians of the New World; and no one would ever have speculated about Africans finding their way to Brazil, or Polynesians to California. The common-sense *primâ facie* view would have been admitted at once, instead of being partially refined on and partially abandoned. North-eastern Asia would have passed for the fatherland to North-western America; and instead of Chinese and Japanese characteristics creating wonder when discovered in Mexico and Peru, the only wonder would have been in the rarity of the occurrence. But geographical discovery came from another quarter, and as it was the Indians of the Atlantic whose history first served as food for speculation, the most natural view of the origin of the American population was the last to be adopted—perhaps it has still to be recognized.

The reason for all this lies in the following fact. The Eskimo, who form the only family common to the Old and the New World, stand in a remarkable contrast to the unequivocal and admitted American aborigines of Labrador, Newfoundland, Canada, the New England States, New York, and the other well-known Indians in general. Size, manners, physical conformation, and language, all help to separate the two stocks. But this contrast extends only to the parts *east*

of the Rocky Mountains. On the west of them there is no such abruptness, no such definitude, no such trenchant lines of demarcation. The Athabascan dialects of New Caledonia and Russian America are notably interspersed with Eskimo words, and *vice versâ*. So is the Koluch tongue of the parts about New Archangel. As for a remarkable dialect called the Ugalents (or Ugyalyackhmutsi) spoken by a few families about Mount St. Elias, it is truly transitional in character. Besides this, what applies to the language applies to the other characteristics as well.

The lines of separation between the Eskimo and the non-Eskimo Americans are as faint on the Pacific, as they are strong on the Atlantic side of the continent.

What accounts for this? The Phænomenon is by no means rare. The Laplander, strongly contrasted with the Norwegian on the west, graduates into the Finlander on the east. The relation of the Hottentot to the Kaffre has been already noticed. So has the hypothesis that explains it. One stock has encroached upon another, and the transitional forms have been displaced. In the particular case before us, the encroaching tribes of the Algonkin class have pressed upon the Eskimo from the south; and just as the present Norwegians and Swedes

now occupy the country of a family which was originally akin to the Laps of Lapland (but with more southern characters), the Micmacs and other Red Men have superseded the southerly and transitional Eskimo. Meanwhile, in North-*western* America no such displacement has taken place. The families still stand *in situ*; and the phænomena of transition have escaped obliteration.

Just as the Eskimo graduate in the American Indian, so do they pass into the populations of North-eastern Asia—language being the instrument which the present writer has more especially employed in their affiliation. From the Peninsula of Aliaska to the Aleutian chain of islands, and from the Aleutian chain to Kamskatka is the probable course of the migration from Asia to America—traced backwards, *i. e.* from the goal to the starting-point, from the circumference to the centre.

Then come two conflicting lines. The Aleutians may have been either Kamskadales or Curile Islanders. In either language there is a sufficiency of vocables to justify either notion. But this is a mere point of minute ethnology when compared with the broader one which has just preceded it. The Japanese and Corean populations are so truly of the same class with the Curile islanders, and the Koriaks to the

north of the sea of the Okhotsk are so truly Kamskadale, that we may now consider ourselves as having approached our conventional centre so closely as to be at liberty to leave the parts in question for the consideration of another portion of the circumference—another extreme point of divergence.

II. *From Van Diemen's Land to the South-Eastern parts of Asia.*—The aborigines of Van Diemen's Land, conveniently called Tasmanians, have a fair claim, when considered by themselves, to be looked upon as members of a separate species. The Australians are on a level low enough to satisfy the most exaggerated painters of a *state of nature*; but the Tasmanians are, apparently, lower still. Of this family but a few families remain—occupants of Flinders' Island, whither they have been removed by the Van Diemen's Land Government. And here they decrease; but whether from want of room or from intermarriage is doubtful. The effects of neither have been fairly investigated. From the Australians they differ in the texture of their hair—the leading diagnostic character. The Tasmanian is shock-headed, with curled, frizzy, matted and greased locks. None of their dialects are intelligible to any Australian, and the commercial intercourse between the two islands seems to have been little or none. Short

specimens of four mutually unintelligible dialects are all that I have had the opportunity of comparing. They belong to the same class with those of Australia, New Guinea, and the Papua islands; and this is all that can safely be said about them.

It is an open question whether the Tasmanians reached Van Diemen's Land from South Australia, from Timor, or from New Caledonia —the line of migration having, in this latter case, wound *round* Australia, instead of stretching *across* it. Certain points of resemblance between the New Caledonian and Tasmanian dialects suggest this refinement upon the *primâ facie* doctrine of an Australian origin: and the texture of the hair, as far as it proves anything, goes the same way.

Australia is radically and fundamentally the occupancy of a single stock: the greatest sign of difference between its numerous tribes being that of language. Now this is but a repetition of the philological phænomena of America. The blacker and ruder population of Timor represents the great great ancestors of the Australians; and it was from Timor that Australia was, apparently, peopled. I feel but little doubt on the subject. Timor itself is connected with the Malayan peninsula by a line of dark-colored, rude, and fragmentary populations, to be found in Ombay and

Floris at the present moment, and inferred to have existed in Java and Sumatra before the development of the peculiar and encroaching civilization of the Mahometan Malays.

It is in the Malayan peninsula that another line of migration terminates. From New Caledonia to New Guinea, a long line of islands—Tanna, Mallicollo, Solomon's Isles, &c.—is occupied by a dark-skinned population of rude Papuas, with Tasmanian rather than Australian hair; *i. e.* with hair which is frizzy, crisp, curled, or mop-headed, rather than straight, lank, or only wavy. This comes from New Guinea; New Guinea itself comes from the Eastern Moluccas; *i. e.* from their darker populations. These are of the same origin with those of Timor; though the lines of migration are remarkably distinct. One is from the Moluccas to New Caledonia *via* New Guinea; the other is *via* Timor to Australia.

Both these migrations were early, earlier than the occupancy of Polynesia. The previous occupancy of Australia and New Guinea proves this; and the greater differences between the different sections of the two populations do the same.

III. *From Easter Island to the South-Eastern parts of Asia.*—The northern, southern, and eastern extremities of Polynesia are the Sand-

wich Islands, New Zealand, and Easter Island, respectively. These took their occupants from different islands of the great group to which they belong; of which the Navigators' Islands were, probably, the first to be peopled. The Radack, Ralik, Caroline, and Pelew groups connect this group with either the Philippines or the Moluccas; and when we reach these, we arrive at the point where the Papuan and Polynesian lines diverge. Just as the Papuan line overlapped or wound round Australia, so do the Micronesians and Polynesians form a circuit round the whole Papuan area.

As the languages, both of Polynesia and Micronesia, differ from each other far less than those of New Guinea, the Papuan Islands, and Australia, the separation from the parent stock is later. It is, most probably, through the Philippines that this third line converges towards the original and continental source of all three. This is the south-eastern portion of the Asiatic Continent, or the Indo-Chinese Peninsula.

The Malay of the Malayan Peninsula is an *inflected* tongue, as opposed to the Siamese of Siam, which belongs to the same class as the Chinese, and is monosyllabic. This gives us a convenient point to stop at.

In like manner the Corean and Japanese tongues, with which we broke off the American

line of migration, were polysyllabic; though the Chinese, with which they came in geographical contact, was monosyllabic.

The most remarkable fact connected with the Oceanic stock is the presence of a certain number of Malay and Polynesian words in the language of an island so distant as Madagascar; an island not only *distant from* the Malayan Peninsula, but *near to* the Mozambique coast of Africa, an ethnological area widely different from the Malay.

Whatever may be the inference from this fact—and it is one upon which many very conflicting opinions have been founded—its reality is undoubted. It is admitted by Mr. Crawfurd, the writer above all others who is indisposed to admit the Oceanic origin of the Malagasi, and and it is accounted for as follows: "A navigation of 3000 miles of open sea lies between them,* and a strong trade-wind prevails in the greater part of it. A voyage from the Indian Islands to Madagascar is possible, even in the rude state of Malayan navigation; but return would be wholly impossible. Commerce, conquests, or colonization, are, consequently, utterly out of the question, as means of conveying any portion of the Malayan language to Madagascar. There remains, then, but one way in which this could

* The Indian Islands and Madagascar.

have taken place—the fortuitous arrival on the shores of Madagascar of tempest-driven Malayan *praus*. The south-east monsoon, which is but a continuation of the south-east trade-wind, prevails from the tenth degree of south latitude to the equator, its greatest force being left in the Java Sea, and its influence embracing the western half of the island of Sumatra. This wind blows from April to October, and an easterly gale during this period might drive a vessel off the shores of Sumatra or Java, so as to make it impossible to regain them. In such a situation she would have no resource but putting before the wind, and making for the first land that chance might direct her to; and that first land would be Madagascar. With a fair wind and a stiff breeze, which she would be sure of, she might reach that island, without difficulty, in a month. * * * The occasional arrival in Madagascar of a shipwrecked *prau*, might not, indeed, be sufficient to account for even the small portion of Malayan found in the Malagasi; but it was offering no violence to the manners or history of the Malay people, to imagine the probability of a piratical fleet, or a fleet carrying one of those migrations, of which there are examples on record, being tempest-driven, like a single *prau*. Such a fleet, well equipped, well stocked, and well manned, would not only

be fitted for the long and perilous voyage, but reach Madagascar in a better condition than a fishing or trading boat. It may seem, then, not an improbable supposition, that it was through one or more fortuitous adventures of this description, that the language of Madagascar received its influx of Malayan."

As a supplement to the remarks of Mr. Crawfurd, I add the following account from Mr. M. Martin: "Many instances have occurred of the slaves in Mauritius seizing on a canoe, or boat, at night-time, and with a calabash of water and a few manioc, or Cassada roots, pushing out to sea, and endeavoring to reach across to Madagascar or Africa, through the pathless and stormy ocean. Of course they generally perish, but some succeed. We picked up a frail canoe within about a hundred miles of the coast of Africa; it contained five runaway slaves, one dying in the bottom of the canoe, and the others nearly exhausted. They had fled from a harsh French master at the Seychelles, committed themselves to the deep without compass or guide, with a small quantity of water and rice, and trusting to their fishing-lines for support. Steering by the stars, they had nearly reached the coast from which they had been kidnapped, when nature sank exhausted, and we were just in time to save four of their lives. So long as

the wanderers in search of home were able to do so, the days were numbered by notches on the side of the canoe, and twenty-one were thus marked when met with by our vessel."

These extracts have been given for the sake of throwing light upon the most remarkable Oceanic migration known—for migration there must have been, even if it were so partial as Mr. Crawfurd makes it; migration which may make the present Malagasi Oceanic or not, according to the state in which they found the island at their arrival. If it were already peopled, the passage across the great Indian Ocean is just as remarkable as if it were, till then, untrodden by a human foot. The only additional wonder in this latter case would be the contrast between the Africans, who missed an island so near, and the Malays who discovered one so distant.

Individually, I differ from Mr Crawfurd in respect to the actual differences between the Malay and the Malagasi, with the hesitation and respect due to his known acquirements in the former of these languages; but I differ more and more unhesitatingly from him in the valuation of them as signs of ethnological separation; believing, not only that the two languages are essentially of the same family, but that the descent, blood, or pedigree of the Malagasi is as Oceanic as their language.

IV. *From the Cape of Good Hope to the*

South-western parts of Asia.—The Hottentots of the Cape have a better claim than any other members of the human kind to be considered as a separate species. Characteristics apparently differential occur on all sides. Morally, the Hottentots are rude; physically, they are undersized and weak. In all the points wherein the Eskimo differs from the Algonkin, or the Lap from the Fin, the Hottentot recedes from the Kaffre. Yet the Kaffre is his nearest neighbor. To the ordinary distinctions, steatomata on the nates and peculiarities in the reproductive organs have been superadded.

Nevertheless, a very scanty collation gives the following philological similarities; the Hottentot dialects* being taken on the one side, and the other African languages† on the other. I leave it to the reader to pronounce upon the import of the table; adding only the decided expression of my own belief that the coincidences in question are too numerous to be accidental, too little onomatopœic to be organic, and too widely as well as too irregularly distributed, to be explained by the assumption of intercourse or intermixture.

* Viz.: the Korana, Saab, Hottentot, and Bushman.

† The Agow, Somauli, and the rest; some being spoken very far north, as the Agow and Seracolé. This list has already been published by the author in his Report on Ethnological Philology, (Transactions of the Association for the Advancement of Science, 1847).

English	sun.
Saab	*t'koara.*
Hottentot	*sorre.*
Corana	*soroh.*
Agow	*quorah.*
Somauli	*ghurrah.*
Kru	*guiro.*
Kanga	*jiro.*
Wawn	*jirri.*

English	tongue.
Corana	*tamma.*
Bushman	*t'inn.*
Fertit	*timi.*

English	neck.
Bushman	*t'kau.*
Darfur	*kiu.*

English	hand.
Corana	*t'koam.*
Shilluck	*kiam.*

English	tree.
Corana	*peikoa.*
Bushman	*t'hauki.*
Shilluck	*yuke.*

English	mountain.
Corana	*teub.*
Falasha	*duba.*

English	ear.
Corana	*t'naum.*
Bullom	*naimu.*

English	star.
Corana	*kambrokoa.*
Kossa	*rumbereki.*

English	bird.
Bushman	*t'kanni.*
Mandingo	*kuno.*

English	sleep.
Corana	*t'kchom.*
Bushman	*t'koing.*
Susu	*kima.*
Howssa	*kuana.*

English	fire.
Corana	*taib.*
Congo	*tubia.*
Somauli	*dub.*
Bushman	*t'jih.*
Fot	*diu.*
Ashantee	*ojia.*

English	neck.
Bushman	*t'kau.*
Makua	*tchico.*

English	die.
Corana	*t'koo.*
Bushman	*tkuki.*
Makua	*ocoa = dead.*

English	good.
Corana	*t'kain.*
Bushman	*teteini.*
Makua	*oni-touny.*

English	foot.
Corana	*t'nah.*
Hottentot	*t'noah.*
Makua	*nyahai.*

English	drink.
Corana	*t'kchaa.*
Howssa	*sha.*

English	star.
Bushman	*tkoaati.*
Bagnon	*hoquvoud.*
Fulah	*kode.*

English	child.
Corana	*t'kob.*

Bushman	*t'katkoang.*	Seracolé, &c.	*ite.*
Bagnon	*colden.*		
Timmani	*kalent.*	*English*	foot.
Bullom	*tshant.*	Corana	*t'keib.*
		Bushman	*t'koah.*
English	tree.	Sereres	*akiaf.*
Bushman	*t'huh.*	Waag Agau.	*tsab.*

Unless we suppose Southern Africa to have been the cradle of the human species, the population of the Cape must have been an extension of that of the Southern Tropic, and the Tropical family itself have been originally Equatorial. What does this imply? Even this—that those streams of population upon which the soil, climate, and other physical influences of South Africa acted, had themselves been acted on by the inter-tropical and equatorial influences of the Negro countries. Hence the human stock upon which the physical conditions had to act, was as peculiar as those conditions themselves. It was not in the same predicament with the inter-tropical South Americans. Between these and the hypothetical centre, in Asia, there was the Arctic Circle and the Polar latitudes—influences that in some portion of the line of migration must have acted on their ancestors' ancestors.

It was nearer the condition of the Australians. Yet the equatorial portion of the line of migration of these latter have been very different from that of the Kaffres and the Hottentots. It was narrow in extent, and lay in fertile islands,

cooled by the breezes and evaporation of the ocean, rather than across the arid table-land of Central Africa—the parts between the Gulf of Guinea and the mouth of the river Juba.

Between the Hottentots and their next neighbors to the north, there are many points of difference. Admitting these to a certain extent, I explain them by the assumption of encroachment, displacement, and the abolition of those intermediate and transitional tribes which connected the northern Hottentots with the southern Kaffres.

And here I must remark, that the displacement itself is no assumption at all, but an historical fact; since within the last few centuries the Amakosa Kaffres alone have extended themselves, at the expense of different Hottentot tribes, from the parts about Port Natal to the head-waters of the Orange River.

It is only the transitional character of the annihilated populations that is an assumption. I believe it, of course, to be a legitimate one; otherwise it would not have been made.

On the other hand, I consider it illegitimate to assume, without inquiry, so broad and fundamental a distinction between the two stocks, as to attribute all points of similarity to intercourse only—none to original affinity. Yet this is done largely. The Hottentot language contains a

sound which I believe to be an *in*-aspirated *h*; *i. e.*, a sound of *h* formed by *drawing in* the breath, rather than by *forcing it out*, as is done by the rest of the world. This is called the *click*. It is a truly inarticulate sound; and as the common *h* is found in the language as well, the Hottentot speech presents the remarkable phenomenon of *two* inarticulate sounds, or two sounds common to man and the lower animals. As a point of anthropology, this may be of value; in ethnology it has probably been misinterpreted.

It is found in *one* Kaffre dialect. What are the inferences? That it has been adopted from the Hottentot by the Kaffre; just as a Kaffre gun has been adopted from the Europeans. This is one of them.

The other is that the sound in question is less unique, less characteristic, and less exclusively Hottentot than was previously believed.

Now this is certainly not one whit less legitimate than the former; yet the former is the commoner notion. Perhaps it is because it flatters us with a fresh fact, instead of chastening us by the correction of an over-hasty generalization.

Again: the root *t-k* (as in *tixo*, *tixme*, *utiko*) is at once Hottentot and Kaffre. It means either a Deity, or an epithet appropriate to a Deity.

Surely the doctrine that the Kaffres have simply borrowed parts of their theological vocabulary from the Hottentots, is neither the only nor the most logical inference here.

The Kaffre area is so large that it extends on both sides of Africa to the equator: and the contrast which it supplies when compared with the small one of the Hottentots, is a repetition of the contrasts already noticed in America.

The peculiarities of the Kaffre stock are fully sufficient to justify care and consideration, before we place them in the same class either with the true Negroes, or with the Gallas, Nubians, Agows, and other Africans of the water-system of the Nile. Yet they are by no means of that broad and trenchant kind which many have fancied them. The undoubted Kaffre character of the languages of Angola, Loango, the Gaboon, the Mozambique, and Zanzibar coasts, is a fact which must run through all our criticism. If so, it condemns all those extreme inferences which are drawn from the equally undoubted peculiarities of the Kaffres of the Cape. And why? Because these last are extreme forms; extreme, rather than either typical or—what is more important—transitional.

Let us, however, look to them. What find we then? Until the philological evidence in favor of the community of origin of the inter-

tropical Africans of Congo on the west, and of Inhambame, Sofala, the Mozambique, &c., on the east, was known, no one spoke of the natives in any of those countries as being any thing else but Negro, or thought of enlarging upon such differences as are now found between them and the typical Black.

Even in respect to the languages, there are transitional dialects in abundance. In Mrs. Kilham's tables of 31 African languages, the last is a *Kongo* vocabulary, all the rest being Negro. Now this Kongo vocabulary, which is truly Kaffre, differs from the rest so little more than the rest do from each other, that when I first saw the list, being then strongly prepossessed by the opinion that the Kaffre stock of tongues was, to a great extent, a stock *per se*, I could scarcely believe that the true Kongo and Kaffre language was represented; so I satisfied myself that it was so, by a collation with other undoubted vocabularies, before I admitted the inference. And this is only one fact out of many.*

Again—the Negroes themselves are referable to an extreme rather than a normal type; and so far are they from being co-extensive with the *Africans*, that it is almost exclusively along the valleys of rivers that they are to be found. There

* A table showing this is to be found in the Transactions of the British Association for 1847, &c., p. 224—228.

are none in the extra-tropical parts of Northern, none in the corresponding parts of Southern Africa; and but few on the table-lands of even the two sides of the equator. Their areas, indeed, are scanty and small; one lies on the Upper Nile, one on the Lower Gambia and Senegal, one on the Lower Niger, and the last along the western coast, where the smaller rivers that originate in the Kong Mountains form hot and moist alluvial tracts.

From whatever other Africans the Negros are to be separated, they are not to be disconnected from the Kaffres, the chief points of contact and transition being the parts about the Gaboon.

Neither are the Kaffres to be too trenchantly cut off from the remarkable families of the Sahara, the range of Atlas, and the coasts of the Mediterranean—families which it is convenient to take next in order; not because this is the sequence which most closely suits either their geography or their ethnology, but because the criticism which has lately been applied to them best helps us in the criticism of the present affiliations.

On the confines of Egypt, in the oasis of Siwah, we find the most eastern members of the great Berber, Amazirgh, or Kabyle family; and we find them as far west as the Canary Isles, of

which they were the occupants as long as a native population occupied them at all. Members of the same stock were the ancient subjects of Jugurtha, Syphax, and Masinissa. Mr. Francis Newman, who has paid more attention to the speech of the Berber tribes than any Englishman (perhaps than any European), has shown that it deserves the new and convenient name of *Sub*-Semitic—a term to be enlarged on.

Let us first take a language in its first state of inflexion, when passing from the monosyllabic form of the Chinese and its allied tongues, it just begins to incorporate with its hitherto unmodified nouns and verbs, certain propositions denoting *relation*, certain adverbs denoting *time*, and certain pronouns of person or possession; by means of all which it gets equivalents to the cases, tenses, and persons of the more advanced forms of speech.

This is the germ of Conjugation and Declension; of the Accidents of Grammar. Let us, however, go farther. Over and above the simple juxtaposition and incipient incorporation of these previously separable and independent particles, let there be certain internal ones; those, for instance, which convert the English Present Tenses *fall* and *speak* into the Preterites *fell* and *spoke*—or something of the same sort.

Farther still. Let such changes of *accent* as occur when we form an adjective like *tyránnical*, from a substantive like *týrant*, be superadded.

The union of such processes as these will undoubtedly stamp a remarkable character upon the language in which they appear.

But what if they go farther? or what if, without actually going farther, the tongues which they characterize find expositors who delight in giving them prominence, and also exaggerate their import? This is no hypothetical case.

A large proportion of roots almost necessarily contain three consonants; e. g., *bread*, *stone*, &c., pronounced *bred*, *stón*, &c. This is one fact.

In many languages there is an inability to pronounce two consonants belonging to the same syllable, in immediate succession; an inability which is met by the insertion of an intervening vowel. The Finlander, instead of *Krist*, must say either *Ekristo* or *Keristo*. This principle in English, would convert *bred* into *bered* or *ebred*, and *stón* into *estón* or *setón*. This is another fact.

These two and the preceding ones should now be combined. A large proportion of roots containing three consonants may induce a gram-

marian to coin such a term as *triliteralism*, and to say that this *triliteralism* characterizes a certain language.

Then, as not only these consonants are separated from one another by intervening vowels, but as the vowels themselves are subject to change, (these changes acting upon the accentation,) the triliteralism becomes more important still. The consonants look like the framework or skeleton of the words, the vowels being the modifying influences. The one are the *constants*, the other the *variants;* and *triliteral roots with internal modifications* becomes a philological byword which is supposed to represent a unique phenomenon in the way of speech, rather than the simple result of two or three common processes united in one and the same language.

But the force of system does not stop here. Suppose we wished to establish the paradox that the English was a language of the sort in question. A little ingenuity would put us up to some clever legerdemain. The convenient aspirate *h*—like the bats in the fable of the birds and beasts at war—might be a consonant when it was wanted to make up the complement of three, and a vowel when it was *de trop*. Words like *pity* might be made triliteral (*triconsonantal*) by doubling the *tt;* words like

pitted, by ejecting it. Lastly, if it were denied that two consonants must necessarily be separated by a vowel, it would be an easy matter to say that between such sounds as the *n* and *r* in *Henry*, the *b* and *r* in *bread*, the *r* and *b* in *curb*, there was really a very short vowel; and that *Henery*, *bered*, *curub*, were the true sounds; or that, if they were not so in the nineteenth century, they were two thousand years ago.

Now let all this be taught and believed, and who will not isolate the language in which such remarkable phenomena occur?

All this *is* taught and believed, and consequently there *is* a language, or rather a group of languages, thus isolated.

But the isolation does not stop with the philologist. The anatomist and the historian support it as well. The nations who speak the language in question are in the neighborhood of Blacks, but without being Blacks themselves; and they are in contact with rude Pagans; themselves being eminently monotheistic. Their history also has been an influential one, morally and materially as well; whilst the skulls are as symmetrical as the skull of the famous Georgian female of our first chapter, their complexions fair or ruddy, and their noses so little African as to emulate the eagle's beak in prominent convexity. All this exaggerates the elements of isolation.

The class or family thus isolated, which—as stated above—has a real existence, has been conveniently called *Semitic;* a term comprising the twelve tribes of Israel and the modern Jews so far as they are descended from them, the Syrians of ancient, and, partially, of modern Syria, the Mesopotamians, the Phœnicians, the Assyrians, the Babylonians, the Arabs, and certain populations of Æthiopia or Abyssinia.

Further facts, real or supposed, have contributed to isolate this remarkable and important family. The Africans who were nearest to them, both in locality and civilization—the Ægyptians of the Pharaohnic empire, builders of the pyramids, and writers in hieroglyphics—have ceased to exist as a separate substantive nation. Their Asiatic frontagers, on the other hand, were either Persians or Armenians.

Everything favored isolation here. The Jew and Ægyptian were in strong contrast, from the beginning, and all our earliest impressions are in favor of an over-valuation of their differences. As for the Persian, he was so early placed in a different class—a class which, from the fact of its being supposed to contain the Germans, Greeks, Latins, Slavonians, and Hindus as well, has been called Indo-European—that he had a proper and peculiar position of his own; and something almost as stringent in

the way of demarcation applied to the Armenian. Where, then, were the approaches to the Semitic family to be found?

Attempts were made to connect them with the Indo-Europeans; I think unsuccessfully. Of course there was a certain amount of relationship of some kind; but it by no means followed that this established the real affiliations. There was *a* connection; but not *the* connection. The reasons for this view lay partly in certain undoubted affinities with the Persians, and partly in the fact of the Jew, Syrian and Arab skulls, and the Jew, Syrian and Arab civilizations coming under the category of *Caucasian*.

Consciously or unconsciously, most writers have gone on this hypothesis—naturally, but inconsiderately. Hence the rough current opinion has been, that if the Semitic tribes were in any traceable degree of relationship with the other families of the earth, that relationship must be sought for amongst the Indo-Europeans.

The next step was to raise the Semitic class to the rank of a standard or measure for the affinities of unplaced families; and writers who investigated particular languages more readily inquired whether such languages were Semitic, than what the Semitic tongues were themselves. Unless I mistake the spirit in which many ad

mirable investigations have been conducted, this led to the term *Sub*-Semitic. Men asked about the amount of *Semitism* in certain families as if it were a substantive and inherent property, rather than what *Semitism* itself consisted in.

And now *Sub*-Semitic tongues multiplied; since Sub-Semitism was a respectable thing to predicate of the object of one's attention.

The ancient Ægyptian was stated to be *Sub*-Semitic—Benfey and others having done good work in making it so.

Mr. Newman did the same with the Berber. Meanwhile the anatomist acted much like the philologist, and brought the skulls of the old Ægptians in the same class with those of the Jews and Arabs, so as to be Caucasian.

But the Caucasians had been put in a sort of antithesis to the Negros; and hence came mischief. Whatever may be the views of those able writers who have investigated the Sub-Semitic Africans, when pressed for definitions, it is not too much to say that, in practice, they have all acted as if the moment a class became Semitic, it ceased to be African. They have all looked one way; that being the way in which good Jews and Mahometans look—towards Mecca and Jerusalem. They have forgotten the phænomena of correlation. If Cæsar is like

Pompey, Pompey must be like Cæsar. If African languages approach the Hebrew, the Hebrew must approach them. The attraction is mutual; and it is by no means a case of Mahomet and the mountain.

I believe that the Semitic element of the Berber, the Coptic and the Galla are clear and unequivocal; in other words, that these languages are truly Sub-Semitic.

In the languages of Abyssinia, the Gheez and Tigré, admitted, as long as they have been known at all, to be *Semitic*, graduate through the Amharic, the Falasha, the Harargi, the Gafat, and other languages which may be well studied in Dr. Beke's valuable comparative tables,* into the Agow tongue, unequivocally indigenous to Abyssinia; and through this into the true Negro classes.

But unequivocal as may be the Semitic elements of the Berber, Coptic and Galla, their affinities with the tongues of Western and Southern Africa are more so. I weigh my words when I say, not *equally*, but *more*. Changing the expression for every foot in advance which can be made towards the Semitic tongues in one direction, the African philologist

* Transactions of the Philological Society, No. 33.

can go a yard towards the Negro ones in the other.†

Of course, the proofs of all this in full detail would fill a large volume; indeed, the exhaustion of the subject, and the annihilation of all possible and contingent objections would fill many. The position, however, of the present writer is not so much that of the engineer who has to force his water up to a higher uphill by means of pumps, as it is that of the digger and delver who merely clears away artificial embankments which have hitherto prevented it finding its own level according to the common laws of nature. He has little fear from the results of separate and independent investigation, when a certain amount of preconceived notions have been unsettled.

To proceed with the subject—the convergence of the lines of migration in Africa is broken or unbroken, clear or indistinct, continuous or irregular, to much the same extent, and

† A short table of the Berber and Coptic, as compared with the other African tongues, may be seen in the Classical Museum, and in the Transactions of the British Association, for 1846. In the Transactions of the Philological Society is a grammatical sketch of the Tumali language, by Dr. L. Tutschek of Munich. Now the Tumali is a truly Negro language of Kordofan; whilst in respect to the extent to which its inflections are formed by internal changes of vowels and accents, it is fully equal to the Semitic tongues of Palestine and Arabia.

much in a similar manner, with those of America. The moral contrasts which were afforded by the Mexicans and Peruvians reappear in the case of the Ægyptians and the Semitidæ. As to the Hottentots, they, *perhaps*, are more widely separated from their next of kin than any Americans, the Eskimo not being excepted; so much so, that if the phænomena of their language be either denied or explained away, they may pass for a new species.

Now if the reader have attended to the differences between the *Ethnological* and the *Anthropological* principles of classification, he must have inferred the necessity of certain differences of nomenclature, since it is hardly likely that the terms which suit the one study will exactly fit the other. And such is really the case. If the word *Negro* mean the combination of woolly hair, with a jetty skin, depressed nose, thick lips, narrow forehead, acute facial angle, and prominent jaw, it applies to Africans as widely different from each other as the Laplander is from the Samoeid and Eskimo, or the Englishman from the Finlander. It applies to the inhabitants of certain portions of different river-systems, *independent of relationship* — and *vice versâ*. The Negros of Kordofan are nearer in descent to the Copts and Arabs than are the lighter-colored and more civilized

Fulahs. They are also nearer to the same than they are to the Blacks of Senegambia. If this be the case, the term has no place in Ethnology, except so far as its extensive use makes it hard to abandon. Its real application is to Anthropology, wherein it means the effects of certain influences upon certain intertropical Africans, irrespective of descent, but not irrespective of physical condition. As truly as a short stature and light skin coincide with the occupancy of mountain ranges, the Negro physiognomy coincides with that of the alluvia of rivers. Few writers are less disposed to account for ethnological differences by reference to a change of physical conditions rather than original distinction of species than Dr. Daniell; nevertheless, he expressly states that when you leave the low swamps of the Delta of the Niger for the sandstone country of the interior, the skin becomes fairer, and black becomes brown, and brown yellow.

Of the African populations most immediately in contact with the typical Negro of the western coast, the fairest are the Nufi, (conterminous with the Ibos of the Lower Niger), and the Fulahs who are spread over the highlands of Senegambia, as far in the interior as Sakatú, and as far south as the Nufi frontier.

On the other hand, the darkest of the fairer

families are the Tuaricks of Wadreag, who belong to the Berber family, and the Sheyga Arabs of Nubia.

The Nubians themselves, or the natives of the Middle Nile, between Ægypt and Sennaar, are truly transitional in features between the Ægyptians and the Blacks of Kordofan. So they are in language, and apparently in civilizational development.

The best measure of capacity, in this respect, on the part of those Africans who have been less favored by external circumstances and geographical position than the ancient Ægyptians, is to be found amongst the Mandingos and Fulahs, each of which nations has adopted the Mahometan religion, and some portion of the Arabic literature along with it. Of large towns there are more in *Negro* Africa than there has ever been in Mongolia and Tartary. Yet the Tartars are neither more nor less than Turks, like those of Constantinople, and the Mongolians are closely connected with the industrial Chinese.

That the uniformity of languages throughout Africa is greater than it is either in Asia or Europe, is a statement to which I have not the least hesitation in committing myself.

And now, having brought the African migration—to which I allot the Semitic populations

of Arabia, Syria, and Babylonia—from its extremity at the Cape to a point so near the hypothetical centre as the frontiers of Persia and Armenia, I leave it for the present.

* * * * * * *

The English of England are not the earliest occupants of the island. Before them were the ancient Britons. Were these the earliest occupants? Who were the men by whose foot Britain, till then the home of the lower animals alone, was first trodden? This is uncertain. Why may not the Kelts have stood in the same relation to some rude Britons still more primitive, that the Anglo-Saxons did to the Kelts? Perhaps they really did so. Perhaps, even the rude and primitive tribes thus assumed had aborigines who looked upon them as intruders, themselves having in their turn been interlopers. The chief objection against thus multiplying aboriginal aboriginies is the rule *de non apparentibus*, &c.

But Britain is an *island*. Everything relating to the natural history of the useful arts is so wholly uninvestigated, that no one has proposed even to approximate the date of the first launch of the first boat; in other words, of the first occupancy of a piece of land surrounded by water. The whole of that particular continent in which the first protoplasts saw light, may have re-

mained full to overflowing, before a single frail raft had effected the first human migration.

Britain may have remained a solitude for centuries and millenniums after Gaul had been full. I do not suppose this to have been the case; but, unless we imagine the first canoe to have been built simultaneously with the demand for water-transport, it is as easy to allow that a long period intervened between that time and the first effort of seamanship as a short one. Hence, the date of the original populations of *islands* is not in the same category with that of the dispersion of men and women over *continents*.

On continents, we must assume the extension from one point to another to have been continuous—and not only this, but we may assume something like an equable rate of diffusion also. I have heard that the American population moves bodily, from east to west, at the rate of about eleven miles a year.

As I use the statement solely for the sake of illustrating my subject, its accuracy is not very important. To simplify the calculation, let us say *ten*. At this rate, a circle of migration of which the centre was (say) in the Altai range, would enlarge its diameter at the rate of twenty miles a year; *i. e.*, ten miles at one end of the radius and ten at the other.

Hence, a point a thousand miles from the birth-place of the patriarchs of our species would receive its first occupants exactly one hundred years after the original locality had been found too limited. At this rate a very few centuries would people the Cape of Good Hope, and fewer still Lapland, the parts about Cape Comorin, the Malayan Peninsula, and Kamskatka—all parts more or less in the condition of extreme points.*

Now, as long as any *continental* extremities of the earth's surface remain unoccupied—the stream (or rather the enlarging circle of migration) not having yet reached them—the *primary* migration is going on; and when all have got their complement, the *primary* migration is over. During this primary migration, the relations of man, thus placed in movement, and in

* Nothing is said about Cape Horn; as America in relation to Asia is an island. It is also, perhaps, unnecessary to repeat that both the rate and the centre are hypothetical—either or both may or may not be correct. That which is *not* hypothetical is the approximation to an *equability of rate in the case of continents*. It is difficult to conceive any such conditions as those which deferred the occupancy of islands like Madagascar and Iceland, by emigrants from Africa or Greenland, for an indefinite period, keeping one part of Africa or Greenland empty whilst another was full. Hence, the equality in question is a mere result of the absence, *on continents*, of any conditions capable of arresting it for an indefinite period. The extent to which it may be interfered with by other causes is no part of the present question.

the full, early and guiltless exercise of his high function of subduing the earth, are in conflict with physical obstacles, and with the resistance of the lower animals only. Unless—like Lot's wife—he turn back upon the peopled parts behind him, he has no relations with his fellow-men—at least none arising out of the claim of previous occupancy. In other words—during the primary migration—the world that lay before our progenitors was either brute or inanimate.

But before many generations have passed away, all becomes full to overflowing; so that men must enlarge their boundaries at the expense of their fellows. The migrations that now take place are *secondary*. They differ from the primary in many respects. They are slower, because the resistance is that of Humanity to Humanity; and they are violent, because dispossession is the object. They are partial, abortive, followed by the fusion of different populations; or followed by their extermination, as the case may be. All, however, that we have now to say about them, is the fact of their difference from the *primary* one.

Concerning the *secondary* migrations, we have a considerable amount of knowledge. History tells us of some; ethnological induction suggests others. The *primary* one, however, is

a great mystery. Yet it is one which is continually talked about.

I mention it now (having previously enlarged upon it), for the sake of suggesting a question of some importance in practical Ethnology. It is the one suggested by the remarks upon the aborigines of Britain. When are we sure that the population of any part of a continent is *primary*, *i. e.*, descended from, or representative of the first occupants? Never. There are plenty of cases where, from history, from phænomena of contrast, and from other ethnological arguments, we are quite satisfied that it is *not so;* but none where the evidence is conclusive the other way. At the same time, the doctrine *de non apparentibus* cautions us against assuming displacements unnecessarily.

However, where we have, in addition to the abscence of the signs of previous occupancy, an extreme locallity, (*i. e.*, a locality at the farthest distance, in a given direction, from the hypothetical centre,) we have *primâ facie* evidence in favor of the population representing a *primary* migration. Thus:

1, 2. The Hottentots and Laplanders, amongst the families of the Continent, are probably primary.

3. The Irish Gaels are the same amongst islanders.

4, 5. America and the Oceanic area appear to be *primary* in respect to the populations of the Continent of Asia; though within their own areas the displacements have been considerable.

CHAPTER V.

The Ugrians of Lapland, Finland, Permia, the Ural Mountains and the Volga—area of the light-haired families—Turanians—the Kelts of Ireland, Scotland, Wales, Gaul—the Goths—the Sarmatians—the Greeks and Latins—difficulties of European ethnology—displacement—intermixture—identification of ancient families—extinction of ancient families—the Etruscans—the Pelasgi—isolation—the Basks—the Albanians—classifications and hypotheses—the term Indo-European—the Finnic hypotheses.

V. *From Lapland to North-western Asia.*—That the Norwegian of Norway stands in remarkable contrast to the Lap of Finmark, has already been stated. There is nothing wonderful in this. The Norwegian is the German from the south, and, consequently, a member of an intrusive population.

The extent to which a similar contrast exists between the Lap and the Finlander, is more remarkable, since both belong to the same family. Of this family, the Laps are an extreme branch, both in respect to physical conformation and geographical position. The term most conveniently used to designate the stock in question is *Ugrian*. In Asia the Voguls, Ostiaks, Votiaks, Tsheremis, Mordunis, and other tribes are *Ugrian*.

The Laps are, generally speaking, swarthy in complexion, black-haired and black-eyed; and so are the Majiars of Hungary. The other Ugrians, however, are remarkable for being, to a great extent, a *blonde* population. The Tshuvatsh have a light complexion with black and somewhat curly hair, and grey eyes. The Morduins fall into two divisions, the Ersad and Mokshad; of which the former are more frequently *red*-haired than the latter. The Tsheremis are light-haired, the Voguls and Ostiaks often red-haied, the Votiaks the most red-haired people in the world. Of course, with this we have blue or grey eyes and fair skins.

Few writers seem ever to have considered the exceptional character of this physiognomy; indeed, it is unfortunate that no term like *blanco* (or *branco*), denoting men lighter colored than the Spaniards and Portuguese, in the same way that *Negro* denotes those who are darker, has been evolved. It is, probably, too late for it being done now. At any rate, complexions like those of the *fair* portion of the people of England, are quite as exceptional as faces of the hue of the Gulf-of-Guinea Blacks.

Like the Negro, the White-skin is chiefly found within limits; and like *Negro*, the term *White* is anthropological rather than ethnological; *i. e.*, the physiognomy in question is spread

over different divisions of our species, and by no means coincides with ethnological relationship.

Nine-tenths of the fair-skinned populations of the world are to be found between 30° and 65° N. lat., and west of the Oby. Nine-tenths of them also are to be found amongst the following four families: 1. The Ugrian. 2. The Sarmatian. 3. The Gothic. 4. The Keltic.

The physical conditions which most closely coincide with the geographical area of the *blonde* branches of the *blonde* families require more study than they have found. From the parts to north and south, it is distinguished by the palpably intelligible differences of latitude. The parts to the east of it differ less evidently; nevertheless, they are steppes and table-lands, rather than tracts of comparatively low forests. The *blonde* area is certainly amongst the moister parts of the world.*

That the Ugrians graduate into the Turks of Tartary and Siberia—themselves a division of a class containing the great Mongolian and Tungusian branches—has been admitted by most writers; Schott having done the best work with the philological part of the question.

* When ethnological medicine shall have become more extensively studied than it is, it will probably be seen that the populations of the area in question are those which are most afflicted by scrofula.

Gabelentz has, I am informed, lately shown that the *Samoeid* tongues come within the same class; a statement which, without having seen his reasons, I am fully prepared to admit.

Now what applies to the Samoeids* applies to two other classes as well:

1. The Yeniseians* on the Upper Yenisey; and

2. The Yukahiri* on the Kolyma and Indijirka.

This gives us one great stock, conveniently called *Turanian*, whereof—

1. The Mongolians.

2. The Tungusians—of which the Mantshús are the best known representatives—

3. The Ugrians, falling into the Lap, Finlandic, Majiar and other branches;—along with

4. The Hyperboreans, or Samoeids, Yeniseians, and Yukahiri—are branches.

And this stock takes us from the North Cape to the Wall of China.

VI. *From Ireland to the Western parts of Asia.*—The rule already referred to, viz., that an island must always be considered to have been peopled from the nearest part of the nearest land of a more continental character than itself, unless reason can be shown to the contra-

* A table showing this is printed in the author's "Varieties of Man," pp. 270–272.

ry, applies to the population of Ireland; subject to which view, the point of emigration from Great Britain must have been the parts about the Mull of Cantyre; and the point of immigration into Ireland must have been the province of Ulster, and the parts that are nearest to Scotland.

Upon this doctrine I see no reason whatever to refine, since the unequivocal fact of the Scotch and Irish Gaelic being the same language confirms it. Here, however, as in so many other cases, the opinions and facts by no means go together; and the notion of Scotland having been peopled from Ireland, and Ireland from some other country, is a common one. The introduction of the *Scots* of *Scotland* from the west, when examined, will be found to rest almost wholly on the following extract from Beda: "procedente tempore, tertiam Scottorum nationem in parte Pictorum recepit, qui duce Reudâ de Hiberniâ progressi, amicitiâ vel ferro sibimet inter eos has sedes quas hactenus habent vindicârunt; à quo videlicet duce, usque hodie Dalreudini vocantur: nam eorum lingua *Daal* partem significat."

Now, as this was written about the middle of the eighth century, there are only two statements in it that can be passed for contemporary evidence; viz., the assertion that at the time of Beda a por-

tion of Scotland was called the country of the *Dalreudini;* and that in their language *dael* meant *part.* The Irish origin, then, is grounded upon either an *inference* or a *tradition;* an inference or a tradition which, if true, would prove nothing as to the *original* population of either country; since, the reasoning which applies to the relation between the peninsula of Malacca and the island of Sumatra applies here. *There*, the population first passed from the peninsula to the island, and then back again—reflected so to say—from the island to the peninsula. *Mutatis mutandis* this was the case with Scotland and Ireland, provided that there was any migration at all.

Upon this point the evidence of Beda may or may not be sufficient for the historian. It is certainly unsatisfactory to the ethnologist.

In saying this, I by no means make the disparaging insinuation that the historian is unduly credulous, or that the ethnologist is a model of caution. Neither assertion would be true. The ethnologist, however, like a small capitalist, cannot afford so much credit as his fellow-laborer in the field of Man. He is like a traveller, who, leaving home at the twilight of the evening, must be doubly cautious when he comes to a place where two roads meet. If he take the wrong one, he has nothing but the

long night before him; and his error grows from bad to worse. But the historian starts with the twilight of the dawn; so that the further he goes the clearer he finds his way, and the easier he rectifies any previous false turnings. To argue from cause to effect is to journey in the dim light of the early morn till we reach the blazing noon. To argue from effect to cause is to change the shades of evening for the gloom of night.

As Scotland is to Ireland, so is Gaul to England. From the Shannon to the Loire and Rhine, the stock is one; one, but not indivisible—the British branch [containing the Welsh] and the Gaelic [containing the Scotch] forming its two primary sections.

Next to the Kelts came the Goths; the term *Gothic* being a general designation taken from a particular people. Germany is the native land of these; just as Gaul was of the Kelts. Hence, they lie to the north of that family, as well as to the west of it. Intrusive above all the other populations of the earth, the branches of the Gothic tribes have brought themselves in contact and collision with half the families of the world. First, they encroached upon the Kelts, and, for a time, the tide of conquest fluctuated. It was the Rhine which was the disputed frontier—disputed as much in Cæsar's

time as our own. Next they revenged themselves on the aggressions of Rome; so that the Ostro-*goths* conquered Italy, and the Visi-*goths* Spain. Then came the Franks of France, and the Anglo-Saxons of England. In the ninth and tenth centuries the edges of the German swords turned another way, and Mecklenburg, Pomerania, Prussia, and part of Courland, Silesia, Lusatia, and Saxony were wrested from the *Sarmatians*, lying to the west and south-west.

It is not unusual to raise the two divisions of the great Sarmatian stock to the rank of separate substantive groups—independent of each other, though intimately allied. In this case Lithuania, Livonia, and Courland contain the smaller divisions, which is conveniently and generally called the *Lithuanic*: the population being agricultural, scanty, limited to the country in opposition to the towns, and unimportant in the way of history; a population, which in the tenth and eleventh centuries was cruelly conquered under the plea of Christianity by the German Knights of the Sword—rivals in rapacity and bloodshed to their equivalents of the Temple and St. John—a population which, at the present moment, lies like iron between the hammer and the anvil, between Russia and Prussia; and which, for one brief period only,

under the Jagellons, exercised the equivocal rights of a dominant and encroaching family—for one brief period only within the true historical æra. How far it may have done more at an earlier epoch remains to be considered.

The other branch is the *Slavonic;* comprising the Russians, the Servians, the Illyrians, the Slovenians of Styria and Carinthia, the Slovaks of Hungary, the Tsheks of Bohemia, and the Lekhs (or Poles) of Poland, Mazovia, and Gallicia. A great deal is said about the future prospects of this stock; the doctrine of certain able historians being, that as they are the youngest of nations—a term somewhat difficult to define—and have played but a small part in the world's history hitherto, they have a grand career before them; a prospect more glorious than that of the Romano-Keltic French, or the Germanic English of the Old and New World. I doubt the inference, and I doubt the fact on which it rests. But of this more anon. The Sarmatian Slavono-Lithuanians are the fourth great family of Europe. They certainly lie in the line of migration which peopled Ireland from Asia.

South of these lie two branches of fresh stock, divided from each other, and presenting the difficult phænomenon of geographical discontinuity conjoined with ethnological affinity.

Separated from the most southern Slavonians by the two intrusive populations of the Wallachians and the Majiars, and by the primitive family of the Albanians, come—

a. The Greeks—and separated from the Slavonians of Carinthia and Bohemia by intrusive Germans at the present moment, and by the mysterious Etruscans in ancient times, come—

b. The Italians.—We may call these two families Latin or Hellenic instead of Greek and Italian, if we choose; and as the distribution of nations is best studied during the earliest periods of their history, the former terms are the better.

Before we can consider the classification of these four families—Ugrian, Kelt, Gothic, and Græco-Latin—some fresh observations and certain new facts are requisite.

The ethnology of Europe is undoubtedly more difficult than that of any of the three other quarters of the globe--perhaps more so than that of all the world besides. It has not the character of being so—but so it is. The more we know the more we may know. Illustrated as is Europe by the historian and the antiquarian, it has its dark holes and corners made all the more visible from the illumination.

In the first place, the very fact of its being the home of the great historical nations has

made it the scene of unparalleled displace ments; for conquest is the great staple of history, and *conquest* and *displacement* are correlative terms. A greater portion of Europe can be shown to be held by either mixed or conquering nations than is to be found elsewhere—not that this absolutely proves the encroachments to have been greater; but that gives prominence to the greater degree in which they have been recorded. Hence, where in other parts of the world we shut up our papers and say *de non apparentibus*, &c., in Europe we are forced upon the obscurest investigations, and the subtlest trains of reasoning.

How great is this displacement? The history of only a few out of many of the conquering nations tells us a pregnant story in this respect. It shows us what has taken place within the comparatively brief span of the historical period. What lies beyond this it only suggests.

The Ugrians, with one exception, have ever suffered from the encroachments of others rather than been encroachers themselves. But the exception is a remarkable one.

It is that of the Majiars of Hungary, who, whatever claims they may set up for an extraction more illustrious than the one which they share with the Laplanders and Ostiaks, are

unequivocally Ugrians—no Circassians, as has been vainly fancied, and no descendants from the Huns of Attila, as has been more reasonably supposed. This latter, however, is a supposition invalidated by the high probability of the warriors of the Scourge of God having been Turk.

Be this, however, as it may, their advent into Europe is no earlier than the tenth century, the country which they left having been the present domain of the Bashkirs.

The amount of displacement effected by the Kelts is difficult to determine. We hear of them in so many places that the family seems to be ubiquitous. Utterly disbelieving the Cimmerii of the Cimmerian Bosphorus to have been Keltic, and doubtful about both the Scordisci of the ancient Noricum, and the Celtiberians of ancient Spain, I am inclined to limit the Keltic area at its *maximum* extension, to Venice westwards, and to the neighborhood of Rome southwards. But this is not enough. They may have been aboriginal in parts which they *seem* to have invaded as immigrants. This complicates the question and makes it as hard to ascertain the extent of their encroachments on others, as the extent to which others have encroached on them —a point for further notice.

The Goths have ever extended their frontier

—a frontier which I believe to have once reached no further than the Elbe.* From thence to the Niemen they have encroached at the expense of the Sarmatians—Slavonic or Lithuanic as the case may be.

In the time of Tacitus* it is highly probable that there were no Goths north of the Eyder. Since then, however, Denmark, Sweden, and Norway have been wrested from earlier occupants and become Scandinavian.

The Ugrian family originally extended as far south as the Valdai Mountains. This part of their area is now Russian.

The conquests of Rome have given languages derived from the Latin to Northern Italy, the Grisons, France, Spain and Portugal, Wallachia and Moldavia.

This brings us to another question, that of—

Intermixture.—It is certain that the language of England is of Anglo-Saxon origin, and that the remains of the original Keltic are unimportant. It is by no means so certain that the blood of Englishmen is equally Germanic. A vast amount of Kelticism, not found in our tongue, very probably exists in our pedigrees.

The ethnology of France is still more complicated. Many writers make the Parisian a Ro-

* Both these points are worked out in detail in the Author's *Taciti Germania, with ethnological notes.*

man on the strength of his language; whilst others make him a Kelt on the strength of certain moral characteristics combined with the previous Kelticism of the original Gauls.

Spanish and Portuguese, as languages, are derivatives from the Latin. Spain and Portugal, as countries, are Iberic, Latin, Gothic, and Arab, in different proportions.

Italian is modern Latin all the world over: yet surely there must be much Keltic blood in Lombardy, and much Etruscan intermixture in Tuscany.

In the ninth century every man between the Elbe and the Niemen spoke some Slavonic dialect. They now nearly all speak German. Surely the blood is less exclusively Gothic than the speech.

I have not fallen in with any evidence which induces me to consider the great Majiar invasion of Hungary as anything other than a simple military conquest. If so—and the reasoning applies to nine conquests out of ten—the female half of the ancestry of the present speakers of the Majiar language must have been the women of the country. These were Turk, Slavonic, Turko-Slavonic, Romano-Slavonic, and many other things besides—anything, in short, but Majiar.

The Grisons language is of Roman origin.

So is the Wallachian of Wallachia and Moldavia.

Nevertheless, in each country, the original population must be, more or less, represented in blood by the present.

This is enough to show what is meant by intermixture of blood, the extent to which it demands a special investigation of its own, and the number of such investigations required in the ethnology of Europe. Indeed, it is the subject of a special department of the science, conveniently called *minute ethnology*.

Identification of ancient nations, tribes and families.—If there were no such thing as migration and displacement, the study of the ancient writers would be an easy matter. As it is, it is a very difficult one. Nine-tenths of the names of Herodotus, Strabo, Cæsar, Pliny, Tacitus, and similar writers on ethnology and geography, are not to be found in the modern maps ; or, if found, occur in new localities. Such is the case with the name of our own nation, the *Angli*, who are now known as the people of *Engl-land*; whereas, in the eyes of Tacitus they were Germans. Others have not only changed place, but have become absolutely extinct. This is, of course, common enough. Again, the *name* itself may have changed, though the population to which it applies may

have remained the same, or name and place may have each changed.

All this creates difficulties, though not such as should deter us from their investigation. At the same time, the criticism that must be applied is of a special and peculiar sort. *One* of the more complex questions with which it has to deal is the necessary but neglected preliminary of *determining the language in which this or that geographical or ethnological name occurs*; which is by no means an off-hand process. When Tacitus talks of *Germans*, or Herodotus of *Scythians*, the terms *Scythian* and *German* may or may not belong to the language of the people thus designated; in other words, they may or may not be *native* names—names known to the tribes to which the geographer applies them.

Generally such names are *not* native—a statement which, at first, seems hazardous; since the *primâ facie* view is in favor of the name by which a particular nation is known to its neighbors, being the name by which it characterizes itself. Do not our neighbors call themselves *Français*, whilst we say *French*, and are not the names identical? In this particular case they are; but the case is an exceptional one. Contrast with it that of the word *Welsh*. *Welsh* and *Wales* are the *English* names of the *Cymyr* —English, but by no means native; English,

but as little *Welsh* (strictly speaking) as the word *Indian*, when applied to the Red Men of America, is *American*.

Welsh is the name by which the Englishman denotes his fellow-citizens of the Principality. The German of Germany calls the *Italians* by the same designation; the same by which he knows the *Wallachians* also—since *Wallachia* and *Wales* and *Welshland* are all from the same root. What an error would it be to consider all these three countries as identical, simply because they were so in name! Yet if that name were *native*, such would be the inference. As it is, however, the chief link which connects them is their common relation to Germany (or Germanic England); a link which would have been wholly misinterpreted had we overlooked the German origin of the term, and erroneously referred it to the languages of the countries whereto it had its application.

An extract from Klaproth's "Asia Polyglotta" shall further illustrate this important difference between the name by which a nation is known to itself, and the name by which it is known to its geographer. A certain population of Siberia calls itself *Nyenech* or *Khasovo*. But none of its neighbors so call it. On the contrary, each give it a different appellation.

The	Obi-Ostiaks	call it	*Jergan-Yakh*
"	Tungúsians	"	*Dyândal.*
"	Syranians	"	*Yarang.*
"	Woguls	"	*Yarran-Kum.*
"	Russians	"	*Samõeid.*

What if some ancient tribe were thus polyonymous? What if five different writers of antiquity had derived their information from the five different nations of its neighbors? In such a case there would have been five terms to one object; none of them belonging to the language for which they were used.

The name, then, itself of each ancient population requires a preliminary investigation. And these names are numerous—more so in Europe than elsewhere.

The importance of the populations to which such names apply is greater in Europe than elsewhere. It is safe to say this; because there is a reason for it. From its excessive amount of displacement. Europe is that part of the world where there are the best grounds for believing in the previous existence of absolutely extinct families, or rather in the absolute extinction of families, previously existing. There are no names in Asia that raise so many problems as those of the European *Pelasgi* and *Etrusians.*

The changes and complications involved in the foregoing observations (and they are but few out of many) are the results of comparatively

recent movements; of conquests accomplished within the last twenty-five centuries; of migrations within (or nearly within) the historical period. Those truly ethnological phænomena which belong to the *distribution itself* of the existing families of Europe are, at least, of equal importance.

The most marked instances of *philological isolation* are European; the two chief specimens being the *Basque* and *Albanian* languages.

The *Basque* language of the Pyrenees has the same relation to the ancient language of the Spanish Peninsula that the present Welsh has to the old speech of Britain. It represents it in its fragments; fragments, whereof the preservation is due to the existence of a mountain stronghold for the aborigines to retire to. Now so isolated is this same Basque that there is no language in the world which is placed in the same class with it—no matter what the magnitude and import of that class may be.

The *Albanian* is just as isolated. As different from the Greek, Turkish, and Slavonic tongues of the countries in its neighborhood, as the Basque is from the French, Spanish, and Breton, it is equally destitute of relations at a distance. It is *unclassed*—at least its position as Indo-European is doubtful.

What the Pelasgian and old Etruscan tongues were, is uncertain. They were probably sufficiently different from the languages of their neighborhood, for the speakers of them to be mutually unintelligible. Beyond this, however, they may have been anything or nothing in the way of isolation. They *may* have been as peculiar as the Basque and Albanian. They *may* on the other hand, have been just so unlike the Greek and Latin, as to have belonged to another class—the value of that class being unascertained. Again, that class may or may not have existing representatives amongst the tongues at present existing. I give no opinion on this point. I only give prominence to the isolation of the Basque and Albanian. We *know* these last to be so different from each other, and from all other tongues, as to come under none of the recognized divisions in the way of ethnographical philology and its classifications.

Indo-Germanic. This brings us to the term *Indo-Germanic;* and the term *Indo-Germanic* brings us to the retrospect of the European populations—all of which, now in existence, have been enumerated, but all of which have not been classified.

I. The Ugrians are a branch of the Turanians.

The Turanians form either a whole class or

the part of one, according to the light in which we view them; in other words, the group has one value in philology, and another in anatomy. This is nothing extraordinary. It merely means that their speech has more prominent characters than their physical conformation.

I proceed, however to our specification:—

a. The Turanians in respect to their *physical conformation* are a branch of the *Mongolians*; the Chinese, Eskimo, and others, being members of similar and equivalent divisions.

b. In respect to their *language*, they are the highest group recognized, a group subordinate to none other.

To change the expression of this difference, the anatomical naturalist of the Human Species has in the word *Mongolian* a term of generality to which the philologist has not arrived.

II. The Greeks and Latins—the Sarmatians—and the Germans are referable to a higher group; a group of much the same value as the Turanian.

The characteristics of this group are philological.

a. The *numerals* of the three great divisions are alike.

b. A large per-centage of the names of the commoner objects are alike.

c. The signs of *case* in nouns, and of *person* in verbs, are alike.

So wide has been the geographical extent of the populations speaking languages thus connected (languages which separated from the common mother-tongue subsequent to the evolution of both the cases of nouns, and the persons of verbs), that the literary language of India belongs to the class in question. Hence, when this fact became known, and when India passed for the *eastern* and Germany for the *western* extremity of the great area of this great tongue, the term *Indo-Germanic* became current.

But its currency was of no long duration. Dr. Prichard showed that the Keltic tongues had Indo-Germanic numerals, a certain per-centage of Indo-Germanic names for the commoner objects, and Indo-Germanic personal terminations of verbs. Since then, the Keltic has been considered as a fixed language, with a definite place in the classification of the philologist; and the term *Indo-European*,* expressive of the class to which, along with the Sarmatian, the Gothic, and the Classical tongues of Greece and Italy, it belongs, has superseded the original compound *Indo-Germanic*.

We now know what is meant by *Indo-Euro-*

* For a criticism on this term see pp. 86–89.

pean; a term of, at least, equal generality with the term *Turanian.*

a. In *physical conformation* the Indo-Europeans are a branch of the higher division so improperly and inconveniently called *Caucasian.*

b. In *language* they are the highest group hitherto recognized, a group subordinate to none other.

And we have also improved our measure of the isolation of the—

III. *Basques.*—Anatomically these are *Caucasian* so-called. Philologically, they are the only members of the group to which they belong, and that group is the highest recognized. They are like a species in natural history, which is the only one of its genus, the genus being the only one of its order, and the order being so indeterminate as to have no higher class to which it is subordinate.

IV. *The Albanians* are in the same predicament.

This is the state of classification which preeminently inspires us with the ambition of making higher groups; higher groups in *philology*, since in *anatomy* we have them ready-made; *i. e.*, expressed by the terms Mongolian and Caucasian. The school which has made the most notable efforts in this way is the Scandinavian. In England it is, perhaps, better appreciated

than in Germany, and in Germany better than in France.

I think it had great truth in fragments. It will first be considered on its philological side. Rask—the greatest genius for comparative philology that the world has seen—exhibited the germs of it in his work on the Zendavesta. Herein his hypothesis was as follows. The geologist will follow him with ease. Just as the later formations, isolated and unconnected of themselves, lie on an earlier, and comparatively continuous, substratum of secondary, palæozoic, or primary antiquity, so do the populations, speaking Celtic, Gothic, Slavonic, and Classical languages. Conquerors and encroachers, wherever they came in contact with stocks alien to their own, they made, at an early period of history, nine-tenths of Europe and part of Asia their own. But before them lay an aboriginal population—*before them* in the way of *time*. This consisted of tribes, more or less related to each other, which filled Europe from the North Cape to Cape Comorin and Gibraltar—progenitors of the Laplanders on the north, and the progenitors of the Basques of the Pyrenees on the south—*all at one time continuous*. This time was the period anterior to the invasion of the oldest of the above-mentioned families. More than this, Hindostan was similarly peo-

pled; and, by assumption, the parts between Northern Hindostan and Europe.

Such the theory. Now let us look to the present distribution. Almost all Europe is what is called Indo-European; *i. e.*, Celtic, Gothic, Slavonic, or Classical. But it is not wholly so. In Scandinavia we have the Laps; in Northern Russia the Finns; on the junction of Spain and France the Basques. These are fragments of the once continuous Aborigines, separated from each other by Celts, Goths, and Slavonians. Then, as to India. In the Dekhan we have a family of languages called the Tamul, isolated also. Between each of these points the population is homogeneous as compared with itself; heterogeneous as compared with the tribes just enumerated. But there was once a continuity, even as the older rocks in geology are connected, whilst the newer ones are dissociated.

Such was the hypothesis of Rask; an hypothesis to which he applied the epithet *Finnic*, since the Finn of Finland was the type and sample of these early, aboriginal, hypothetically continuous, and hypothetically connected tongues. The invasion, however, of the stronger Indo-Europeans broke them up. Be it so. It was a grand guess; even if wrong, a grand and a suggestive one. Still it was but a guess. I will not say that no details were worked out. Some few were indicated.

Points which connected tongues so distant as the Tamul and the Finn were noticed, but more than this was not done. Still, it was a doctrine which, if it were proved false, was better than a large per-centage of the true ones. It taught inquirers where to seek the affinities of apparently isolated languages; and it bade them pass over those in the neighborhood, and look to the quarters where other tongues equally isolated presented themselves.

I have mentioned Rask as the apostle of it. Arndt, I am told, was the originator. The countrymen, however, of Rask have been those who have most acted on it.

But they took up the weapon at the other end. It is the *anatomists* and *archæologists* of Scandinavia who have worked it most. The Celts have a skull of their own just as they have a language. So have the Danes, Swedes, Norwegians, Germans, Dutch, and Englishmen. Never mind the characteristics. Suffice, that it was—or was supposed to be—different from that of the Finns and Basques. So had the Hindús, different from that of the Tamuls. Now the burial-places of the present countries of the different Gothic populations contain skulls of the Gothic character only up to a certain point. The *very oldest* stand in contrast with the oldest forms but one. The *very oldest* stand in contrast

with the oldest form but one. The *very oldest* are Lap, Basque, and Tamul. Surely this—if true—confirms the philological theory. But is it true? I am not inclined to change the terms already used. It is a grand and a suggestive *guess*.

More than this is not necessary to say at present; since any further speculation in respect to the migration (*or migrations*) which peopled Europe from the hypothetical centre in Asia is premature. The ethnology of Asia is necessary as a preliminary.

CHAPTER VI.

The Monosyllablic Area—the T'hay—the Món and Khó—Tables—the B'hot—the Chinese—Burmese—Persia—India—Tamulian family—the Brahúi—the Dioscurians—the Georgians—Irón—Mizjeji—Lesgians—Armenians—Asia Minor—Lycians—Carians—Paropamisans—Conclusion.

Our plan is now to ta keup the different lines of migration at the points where they were respectively broken off. This was at their different points of contact with Asia. The first line was—

I. *The American.*—In affiliating the American with the Asiatic, the ethnologist is in the position of an irrigator, who supplies some wide tract of thirsty land with water derived from a higher level, but kept from the parts below by artificial embankments. These he removes; his process being simple but effectual, and wholly independent of the clever machinery of pumps, water-wheels, and similar branches of hydraulics. The obstacle being taken away, gravitation does the rest.

The over-valuation of the Eskimo peculiarities is the great obstacle to American ethnology.

When these are cut down to their due level, the connection between America and Asia is neither more nor less than one of the clearest we have. It is certainly clearer than the junction of Africa and north-western Asia; not more obscure than that between Oceanica and the Transgangetic Peninsula; and incalculably less mysterious than that which joins Asia to Europe.

Indeed, there is no very great break, either philologically or anatomically, until we reach the confines of China. Here, the physical conformation keeps much the same; the language, however, becomes *monosyllabic*.

Now many able writers lay so much stress upon this monosyllabic character, as to believe that the separation between the tongues so constituted, and those wherein we have an increase of syllables with a due amount of inflexion besides, is too broad to be got over. If speech were a mineral, this might, perhaps, be true. But speech *grows*, and if one philological fact be more capable of proof than another, it is that of a monsyllabic and uninflected tongue being a polysyllabic and inflected one in its first stage of development, or rather in its *non*-development.

The Kamskadale, the Koriak, the Aino-Japanese, and the Korean are the Asiatic languages most like those of America. Unhesitatingly as I make this assertion—an assertion for which I

have numerous tabulated vocabularies as proof —I am by no means prepared to say that one-tenth part of the necessary work has been done for the parts in question; indeed, it is my impression that it is easier to connect America with the Kurile Isles and Japan, &c., than it is to make Japan and the Kurile Isles, &c., Asiatic. The group which they form belongs to an area where the displacements have been very great. The Kamskadale family is nearly extinct. The Koreans, who probably occupied a great part of Mantshuria, have been encroached on by both the Chinese and the Mantshús. The same has been the case with the Ainos of the lower Amúr. Lastly, the whole of the northern half of China was originally in the occupancy of tribes who were probably intermediate to their Chinese conquerors, the Mantshús and the Koreans.

That the philological affinities necessary for making out the Asiatic origin of the Americans lie anywhere but on the surface of the language, I confess. Of the way whereby they should be looked for, the following is an instance.

The *Yukahiri* is an Asiatic language of the Kolyma and Indijirka. Compare its numerals with those of the other tribes in the direction of America. They differ. They are not Koriak, not Kamskadale, by no means Eskimo; nor yet Kolush. Before we find the name of a single

Yukahiri unit reappearing in other languages, we must go as far south along the western coast of America as the parts about Vancouver's Island. There we find the Hailtsa tongue—where *malúk* = *two*. Now the Yukahiri term for *two* is not *malúk*. It is a word which I do not remember. Nevertheless, *malúk* = *two* does exist in the Yukahiri. The word for *eight* is *malúk* × the term for four (2 × 4.)

This phænomenon would be repeated in English if our numerals ran thus: 1. *one;* 2. *pair;* 4. *four;* 8. *two-fours;* in which case all arguments based upon the correspondence or non-correspondence of the English numerals with those of Germany and Scandinavia would be as valid as if the word *two* were the actual name of the second unit. Indeed, in one respect they would be more so. The peculiar way in which the Hailtsa *malúk* reappears in the Yukahiri is conclusive against the name being *borrowed*. Whether it is *accidental* is quite another question. This depends upon the extent to which it is a single coincidence, or one out of many. All that is attempted, at present, is to illustrate the extent to which resemblances may be disguised, and the consequent care requisite for detecting them.*

II. *The connection between Oceanica and*

* Since this chapter was written, the news of the premature

South-eastern Asia.—The physical confirmation of the Malays is so truly that of the Indo-Chinese, that no difficulties lie in this department. The philological ones are a shade graver. They involve the doubt already suggested in respect to the relations between a monosyllabic tongue like the Siamese, and a tongue other than monosyllabic like the Malay.

This brings us to the great area of the monosyllabic tongues itself. *Geographically*, it means China, Tibet, the Transgangetic Peninsula, and the Sub-Himalayan parts of northern India, such

death of the most influential supporter of the double doctrine of (*a.*) *the unity of the American families amongst each other*, and (*b.*) *the difference of the American race from all others*—Dr. Morton, of Philadelphia—has reached me. It is unnecessary to say, that the second of these positions is, in the mind of the present writer, as exceptionable as the first is correct. Nor is it likely to be otherwise as long as the *eastern* side of the Rocky Mountains is so exclusively studied as it is by both the American and the English school. I have little fear of the Russians falling into this error. With this remark the objections against the very valuable labors of Dr. Morton begin and end. His *Crania Americana* is by far the most valuable book of its kind. His *Crania Ægyptiaca* and other minor works, especially his researches on *Hybridism*, are all definite additions to ethnological science. The impulse which he, personally, gave to the very active study of the Human Species, which so honorably characterises his countrymen, is more than an Englishman can exactly value. Perhaps, it is second only to that given by Gallatin; perhaps, it is scarcely second.

as Nepal, Sikkim, Assam, the Garo country, and other similar localities.

Politically, it means the Chinese, Nepalese, Burmese, and Siamese empires, along with several British-Indian and independent tribes.

The chief *religion* is Buddhism; the physical conformation unequivocally *Mongolian*.

The transition from *mono*-syllabic to *poly*-syllabic has never created much difficulty with myself; nor do I think it will do so with any writer who considers the great difficulties involved in the denial of it. What these are will become apparent when we look at the map of Asia, and observe the tongues which come in contact with those of the class in question. Then it will become clear that *unless we allow it to form a connecting link, it not only stands alone itself, but isolates other families.* Thus, it is only through the Transgangetic Peninsula that the *Oceanic* family can be connected with the *Indian;* a connection which rests on grounds sufficiently good to have induced careful writers* to believe the affiliation to be *direct* and *immediate*. It is only through this same Transgangetic Peninsula *plus* Tibet and China that the

* Mr. Norris, for instance, of the Asiatic Society, has given reasons for connecting the Australian tongues with those of the Dekhan.

great Siberian families—Turanian and Japanese —can be similarly connected with the Oceanic. Yet such a connection really exists, though, from its indirect character, it is but partially recognised. Nevertheless, it *is* recognised (often, perhaps, unconsciously) by every inquirer who hesitates about separating the Malay from the Mongol.

A difficulty of far greater magnitude arises from the following considerations: There are two principles upon which languages may be classified. According to the first, we take two or more languages as we find them, ascertain certain of their characteristics, and then inquire how far these characteristics coincide. Two or more languages, thus taken, may agree in having a large per-centage of grammatical inflexions, in which case they would agree in certain *positive* characters. On the other hand, two or more languages may agree in the *negative* fact of having a small and scanty vocabulary, and an inflexional system equally limited.

The complication here suggested lies in a fact of which a little reflection will show the truth, viz. that *negative points of similarity prove nothing in the way of ethnological connection*, whence, as far as the simplicity of their respective grammars is concerned, the Siamese, Burmese, Chinese, and Tibetan may be as little

related to each other, or to a common mother-tongue, as the most unlike languages of the whole world of Speech.

Again—it by no means follows that because all the tongues of the family in question are comparatively destitute of inflexion, they are all in the same class. A characteristic of the kind may arise from two reasons; *non*-development, or loss. There is a stage *anterior* to the evolution of inflexions, when each word has but one form, and when relation is expressed by mere juxtaposition, with or without the superaddition of a change of accent. The tendencies of this stage are to combine words in the way of composition, but not to go further. Every word retains, throughout, its separate substantive character, and has a meaning independent of its juxtaposition with the words with which it combines.

But there is also a stage *subsequent* to such an evolution, when inflexions have become obliterated, and when case-endings, like the *i* in *patr-i*, are replaced by prepositions (in some cases by post-positions) like the *to* in *to father*; and when personal endings, like the *o* in *voc-o*, are replaced by pronouns, like the *I* in *I call*. Of the *first* of these stages, the Chinese is the language which affords the most typical specimen that can be found in the present *late* date

of languages—*late*, considering that we are looking for a sample of its earliest forms. Of the *last* of these stages the English of the year 1851 affords the most typical specimen that can be found in the present *early* date of language—early, considering that we are looking for a sample of its latest forms.

Hence—

a. How far the different monosyllabic tongues are *all* in the same stage—is one question.

b. Whether this stage be the *earlier* or the *later* one—is another; and—

c. Whether they are connected by *relationship* as well as in *external form*—is a third.

In answer to this, it is safe to say (*a*.) that they are *all* uninflected, because inflexions have yet to be evolved; not because they have been evolved and lost—as is the case with the English, a language which stands at one end of the scale, just as the Chinese does at the other.

(*b*.) They are, also, all connected by a *bona fide* ethnological relationship; as can be shown by numerous tables; the Chinese and Tibetans being, apparently, the two extremes, in the way of difference.

As for their geographical distribution, it is a blank-and-prize lottery, with large and small areas in juxtaposition and contrast, just as has been the case in America and in Africa; the

Sub-Himalayan parts of British India, Sikkim and Nepâl, and the Indo-Burmese frontier (or the country about Assam and Munipúr) being the tracts where the multiplicity of mutually unintelligible tongues within a limited district is greatest.

Again—whenever the latter distribution occurs, we have either a mountain-fastness, political independence, or the primitive pagan creed —generally all three.

The population speaking a monosyllabic language which is in the most immediate contact with the continental tribes of the Oceanic stock, is the Southern Siamese. This reaches as far as the northern frontier of Kedah (Quedah), about 8° N. L. Everything north of this is monosyllabic, with the exception of a Malay settlement (probably, though not certainly, of recent origin) on the coast of Kambogia.

Now the great stock to which the Siamese belong is called T'hay. Its direction is from north to south, coinciding with the course of the great river Menam; beyond the head-waters of which the T'hay tribes reach as far as Assam. Of these northern T'hay, the *Khamti* are the most numerous; and it is important to know that as many as 92 words out of 100 are common to this dialect and to the classical Siamese of Bankok.

Again, the intermediate tribes of the Upper and Middle Menam—the Lau—speak a language as unequivocally Siamese as the Khamti. If so, the Thay tongue, widely extended as it is in the particular direction from north to south, is a tongue falling into but few dialects; the inference from which is, that it has spread within a comparatively recent period. Consequently, it has encroached upon certain other populations and effected certain displacements.

I think that even in the minuter details that now suggest themselves we can see our way; so far, at least, as to determine in which direction the movement took place—whether it were from north to south or from south to north.

Few classes of tongues can be better studied for ethnological purposes than the monosyllabic. A paper of Buchanan's, and another of Leyden's, are amongst the most valuable articles of the Asiatic Researches. One of Mr. Brown's, in the Journal of the Asiatic Society of Bengal, gives us numerous tabulated vocabularies for the Burmese, Assamese and Indian frontiers. Mr. Hodgson and Dr. Robertson have done still more for the same parts. Lastly, the chief southern dialects, which have been less studied, are tabulated in the second volume of "Crawfurd's Embassy to Siam."

Upon looking over these, we find specimens of the two tongues which lie east and west of the southern Siamese; the first being the *Khô* language of Kambogia, and the second the *Môn* of Pegu. Each of these is spoken over a small area; indeed the Môn, which is, at present, nearly limited to the Delta of the Irawaddi, is fast giving way before the encroaching dialects of the Burmese class, whilst the Khô of Kambogia is similarly limited to the lower part of the Mekhong, and is hemmed in by the Siamese, the Lau, and the Anamitic of Cochin China.

Now, separated as they are, the Môn and Khô are liker to each other than either is to the interjacent Siamese; the inference from this being that at one time they were connected by transitional and intermediate dialects, aboriginal to the lower Menam, but now displaced by the Siamese of Bankok introduced from the parts to the northwards.

If this be the case, the monosyllabic tongue most closely allied to those of the Malayan Peninsula (which are *not* monosyllabic) is not the present Siamese, but the language which the present Siamese displaced.

How far this view is confirmed by any special affinities between the Malay dialects with the Môn and Khô is more than I can say. The examination, however, should be made.

The *southern* Thay dialects are not only less like the Mŏn and Khó than is expected from their locality, but the *northern* ones are less like those of the Indo-Burmese frontier and Assam than the geographical contiguity prepares us to surmise: since the per-centage of words common to the Khamti and the other dialects of Munipur and Assam is only as follows.*

Siamese.	Khamti.			
0	1	per cent.	with the	Aka.
0	1	"	"	Abor.
3	5	"	"	Mishimi.
6	8	"	"	Burmese.
8	8	"	"	Karien.
3	3	"	"	Singpho.
10	10	"	"	Jili.
1	3	"	"	Garo.
3	3	"	"	Munipúri.
1	1	"	"	Songphu.
0	0	"	"	Kapwi.
1	1	"	"	Koreng.
0	0	"	"	Maram.
0	0	"	"	Kamphung.
0	0	"	"	Luhuppa.
0	0	"	"	North Tankhul.
0	0	"	"	Central Tankhul.
0	0	"	"	South Tankhul.
0	0	"	"	Khoibu.
0	0	"	"	Maring.

* Taken, with much besides, from Mr. Brown's Tables, in the Journal of the Asiatic Society of Bengal.

This shows that their original locality is to be sought in an *eastern* as well as in a *northern* direction.

If the T'hay dialects are less like the Burmese than most other members of their class, they are more like the B'hot of Tibet.

English	boat.
Ahom	*ru.*
Khamti	*hu.*
Lau	*heic.*
Siamese	*reng.*
W. Tibetan*	*gru.*
S. Tibetan*	*kua.*

English	bone.
Khamti	*nuk.*
Lau	*duk.*
Siamese	*ka-duk.*
S. Tibetan	*ruko.*

English	crow.
Ahom	*ka.*
Khamti	*ka.*
Lau	*ka.*
Siamese	*ka.*
W. Tibetan	*kha-ta.*

English	ear.
Khamti (3)	*nú.*
W. Tibetan	*sá.*
S. Tibetan	*amcho.*

English	egg.
Ahom	*khrai.*
Khamti	*khai.*
Lau	*khai.*
Siamese	*khai.*

English	father.
Ahom (3)	*po.*
W. Tibetan	*phá.*
S. Tibetan	*pálá.*

English	fire.
Ahom (3)	*fai.*
W. Tibetan	*má.*
S. Tibetan	*mè.*

English.	flower.
Ahom	*blok.*
Khamti	*mok.*
Lau	*dok.*
Siamese	*dokmai.*
W. Tibetan	*me-tog.*
S. Tibetan	*men-tok.*

English	foot.
Ahom	*tin.*
W. Tibetan	*rkang-pa.*
S. Tibetan	*kango.*

English	hair.
Ahom	*phrum.*
Khamti	*phom.*
Lau	*phom.*
Siamese	*phom.*
W. Tibetan	*skra.*
———	*spu.*
S. Tibetan	*ta.*
———	*kra.*

* S. means the *spoken*, W. the *written* Tibetan. The collation has been made from a table of Mr. Hodgson's in the Journal of the Asiatic Society of Bengal. The Ahom is a T'hay dialect.

English	head.
Ahom	*ru.*
Khamti	*ho.*
Lau	*ho.*
Siamese	*hoa.*
W. Tibetan	*mgo.*
S. Tibetan	*go.*

English	moon.
Siamese	*tawan.*
W. Tibetan	*zlava.*
S. Tibetan	*dawa.*

English	mother.
Ahom (4)	*me.*
Tibetan	*ama.*

English	night.
Khamti (3)	*khūn.*
W. Tibetan	*m tshan-mo.*
S. Tibetan	*chen-mo.*

English	oil.
Ahom	*man grá.*
Khamti	*num.*
———	*man.*
Lau (2)	*nam.*
——	*man.*
S. Tibetan	*num.*

English	road.
Ahom (2)	*táng.*
Siamese	*thâng.*
W. Tibetan	*lami.*
S. Tibetan	*lani.*

English	salt.
Ahom	*klu.*
Khamti	*ku.*
Lau	*keu.*
——	*keou.*
Siamese	*kleua.*

English	skin.
Ahom	*plek.*
W. Tibetan	*pag-spa.*
S. Tibetan	*pag-pa.*

English	tooth.
Ahom	*khiu.*
Khamti.	*khiu.*
Lau.	*khiau*
Siamese	*khiau.*
Tibetan	*só*

English	tree.
Ahom	*tun.*
Khamti	*tun.*
Lau	*tón.*
Siamese	*tón.*
W. Tibetan	*l. jon-shing.*
S. Tibetan	*shin dong.*

English	three.
Ahom (3)	*sam.*
W. Tibetan	*q-sum.*
S. Tibetan	*sum.*

English	four.
Ahom (3)	*si.*
W. Tibetan	*bzhi.*
S. Tibetan	*zhyi.*

English	five.
Ahom (3)	*ha.*
W. Tibetan	*lna.*
S. Tibetan	*gna.*

English	six.
Ahom	*ruk.*
Siamese (3)	*hok.*
W. Tibetan	*druk.*
S. Tibetan	*thú.*

English	nine.
Ahom (3)	*kau.*
W. Tibetan	*d-gu.*
S. Tibetan	*guh.*

English	in, on.
Ahom	*nu.*
Khamti	*nau.*
Lau	*neu.*
Tibetan	*la, na.*

English	now.
Ahom	*tinai.*
Khamti	*t'ang.*
Lau	*leng.*
W. Tibetan	*deng tse.*
S. Tibetan	*thanda.*

English	to-morrow.
Ahom	*sang-manai.*
Tibetan	*sang.*

English	drink.
Siamese	*deum.*
W. Tibetan	*pthung.*
S. Tibetan	*^{t}hung.*

English	sleep.
Ahom (2)	*non.*
W. Tibetan	*nyan.*
S. Tibetan	*nye.*

English	laugh.
Ahom	*khru.*
Khamti	*khó.*
Lau	*khoa.*
Siamese	*hoaro.*
W. Tibetan	*^{b}gad.*
S. Tibetan	*$^{f}_{g}$gá.*

The B'hot itself is spoken over a large area, with but little variation. We anticipate the inference. It is an intrusive tongue, of comparatively recent diffusion. What has been its direction? From east to west rather than from west to east; at least such is the deduction from its similarity to the T'hay, and from the multiplicity of dialects—representatives of a receding population—in the Himalayas of Nepâl and Sikkim. This, however, is a point on which I speak with hesitation.

Dialects of the B'hot class are spoken as far westward as the parts about Cashmir and the watershed of the Indus and Oxus. This gives us the greatest extent eastwards of any unequivocally monosyllabic tongue.

The Chinese seem to have effected displacements as remarkable for both breadth and length as the T'hay were for length. We get at their

original locality by the exhaustive process. On the northern and western frontier they keep encroaching at the present moment—at the expense of the Mantshús and Mongolians. For the provinces of Chansi, Pe-tche-li, Chantung, Honan, &c., indeed, for four-fifths of the whole empire, the uniformity of speech indicates a recent diffusion. In Setshuen and Yunnan the type changes, probably from that of the true Chinese to the Tibetan, T'hay and Burmese. In Tonkin and Cochin the language is like but different—like enough to be the only monosyllabic language which is placed by any one in the same section with the Chinese, but different enough to make this position of it a matter of doubt with many. Putting all this together, the south and south-eastern provinces of China appear to be the oldest portions of the present area.

In fixing upon these as the parent provinces, the evidence of ethnology on the one side, and that of the mass of tradition and inference which passes under the honorable title of Chinese history on the other, disagree. This latter is as follows:

At some period anterior to 550 B.C., the first monarch with whom the improvement of China began, and whose name was Yao, ruled over a small portion of the present empire, viz. its

north-west district; and the first nations that he fought against, were the Yen and Tsi, in Pe-tche-li and Shantong respectively.

Later still, Honan was conquered.

B. C. 550. All to the south of the Ta-keang was barbarous; and the title of King of Chinese was only *Vang* or *prince*, not *Hoang-te* or *Emperor*.

At this time Confucius lived. Amongst other things he wrote the *Tschan-tsen*, or Annals of his own time.

B. C. 213. Shi-hoang-ti, the first emperor of all China, built the great wall, colonized Japan, conquered the parts about Nankin, and *purposely destroyed all the previously existing documents upon which he could lay hand.*

B. C. 94. Sse-mats-sian lived. What Shi-hoang-ti missed in the way of records, Sse-mats-sian preserved, and, as such, passes for the Herodotus of China.

A destruction of the earlier records, with a subsequent reconstruction of the history which they are supposed to have embodied, is always suspicious; and when once the principle of reconstruction is admitted, no value can be attached to the intrinsic probability of a narration. It may be probable. It may be true. It cannot, however, be historical unless supported by historical testimony; since if true, it is a guess;

and if probable, a specimen of the tact of the inventor. At best, it can but be *tradition* or an *inference*, the basis of which may be a certain amount of fact—little or great, according to the temperament of the investigator.

Now, in the previous notice of the history of Chinese civilization, we have placed its claims to a high antiquity under as favorable a point of view as is allowable. They bear the appearance of truth—so much so, that if we had reason to believe that there were any means of recording them at so early an epoch as 600 years B. C., and of preserving them to so late a one as the year '51, skepticism would be impertinent. But this is not the case. An historical fact must be taken upon evidence, not upon probabilities; and to argue the antiquity of a civilization like the Chinese from the antiquity of its history, and afterwards to claim an historical value for remote traditions on the strength of an early civilization, is to argue in a circle.

Without saying that *all* argument upon the antiquity of the Chinese Empire is of this sort, it may fairly be said that *much* of it has been so—so much as to make Confucius as mythological a character as Minos, and to bring the earliest reasonable records to an epoch subsequent to the introduction of Buddhism from India. Even this antiquity is only probable.

A square block of land between the Ganges and Upper Irawaddi, is occupied by one dominant, and upwards of thirty subordinate sections of one and the same population—the *Burmese*. Some of these are mountaineers, and have retreated before the Indians from the south and west—encroachers upon the originally Burmese countries of Assam, Chittagong, and Sylhet. Others are themselves intruders, or (what is much the same,) consolidators of conquered countries. Such are the Avans of the Burmese Empire, properly so called, who seem to have followed the course of the Irawaddi, displacing not only small tribes akin to themselves, but the Mon of Pegu as well. Lastly, the Kariens emulate the T'hay in the length of their area and in its north and south direction, being found in the southern part of the Tenaserim Provinces (in 11° N. L.) and on the very borders of China (in 23° N. L.)

No great family has its distribution so closely coincident with a water-system as the one in question. The plateau of Mongolia and the Himalayas are its boundaries. It occupies the whole * of all the rivers which rise within these limits, and fall into either the Bay of Bengal or

* Considering the Burampúter and Ganges as separate rivers.

the Chinese Sea; whereas (with the exception of the Himalayan portions of the Indus and the Ganges) it occupies none of the others. The lines of migration with the Indo-Chinese populations have generally followed the water-courses of the Indo-Chinese rivers; and civilization has chiefly flourished along their valleys. Yet, as these lead to an ocean interrupted by no fresh continent, the effect of their direction has been to isolate the nations who possess them. I imagine that this has much more to do with peculiarities of the Chinese civilization than aught else. Had the Hoang-ho fallen into a sea like the Mediterranean, the Celestial Empire would, probably, have given and taken in the way of social and political influence, have acted on the manners of the world at large, and have itself been reacted on. Differences should only be attributed to so indefinite and so impalpable a force as *race* when all other things are equal.

Upon the principle of taking the questions in the order of complexity, so as to dispose of the simplest first, I pass over, for the present, the connection between Africa and South-Western Asia, and take the easier of the two European ones.

The Turanians.—The line which, beginning at Lapland, and, after exhibiting the great Turanian affiliations, ends at the wall of China,

comprising the Ugrians, Samoeids,* Yeniseians,* Yukahiri,* Turks, Mongols, and Tungusians,† is connected with the area of the monosyllabic languages in different degrees of clearness according to the criterion employed. The physical confirmation is nearly identical. The languages differ—the Turanian, like the Oceanic and the American, being inflected and polysyllabic.‡ With this difference, the complexities of the affiliation begin and end. Their amount has been already suggested.

A great part of Northern Europe, Independent Tartary, Siberia, Mongolia, Tibet, China, and the Transgangetic Peninsula, has now been disposed of. Nevertheless, India, Persia, Asia Minor, and Caucasus remain; in size inconsiderable, in difficulty great—greatly difficult because the points of contact between Europe and Asia, and Africa and Asia, fall within this area; greatly difficult because the displacements have been enormous; greatly difficult because, besides displacement, there has been intermixture as well. Lest any one undervalue the displace-

* Conveniently thrown into a single class, and called *Hyperboreans.*

† The great family of which the *Mantshús* are the best known members.

‡ Not necessarily with *many* syllables, but with *more than one—hyper-mono-syllabic.*

ment, let him look at Asia Minor, which is now Turk, which has been Roman, Persian and Greek, and which has no single unequivocal remnant of its original population throughout its whole length and breadth. Yet, great as this is, it is no more than what we expect *à priori*. What families are and have been more encroaching than the populations hereabouts—Turks from the north, Arabs from the south, and Persians from the east? The oldest empires lie here—and old empires imply early consolidation; early consolidation, premature displacement. Then come the phænomena of intermixture. In India there is a literary language of considerable age, and full of inflexions. Of these inflexions not one in ten can be traced in any modern tongue throughout the whole of Asia. Yet they are rife and common in many European ones. Again, the *words* of this same language, *minus* its inflexions, are rife and common in the very tongues where the inflexions are wanting; in some cases amounting to nine-tenths of the language. What is the inference from this? Not a very clear one at any rate.

Africa has but one point of contact with Asia, *i. e.*, Arabia. It is safe to say this, because, whether we carry the migration over the Isthmus of Suez or the Straits of Babel-Man-

deb, the results are similar. The Asiatic stock, in either case, is the same—Semitic. But Europe, in addition to its other mysteries, has two; perhaps three. One of these is simple enough —that of the Lap line and the Turanian stock. But the others are not so. It is easy to make the Ugrians Asiatic; but by no means easy to connect the other Europeans with the Ugrians. The Sarmatians, nearest in geography, have never been very successfully affiliated with them. Indeed, so unwilling have writers been to admit this relationship, that the Finnic hypothesis, with all its boldness, has appeared the better alternative. Yet the Finnic hypothesis is but a guess. Even if it be not so, it only embraces the Basks and the Albanians; so that the so-called Indo-Europeans still stand over.

For reasons like these, the parts forthcoming will be treated with far greater detail than those which have preceded; with nothing like the detail of *minute* ethnology, but still slowly and carefully.

All that thus stands over for investigation is separated from the area already disposed of by that line of mountains which is traced from the Garo Hills in the north-east of Bengal to the mouth of the Kuban in the Black Sea. First come the Eastern Himalayas, which, roughly

speaking, may be said to divide the Indian kingdoms and dependencies from the Chinese Empire. They do not do so exactly, but they do so closely enough for the present purpose.

They may also be said in the same way, to divide the nations of the Hindu from those of more typically Mongolian conformation.

They may also be said, in the same way, to divide the Indian tongues from the monosyllabic.

On the *north* side of this range, languages undoubtedly monosyllabic are spoken as far westwards as Little Tibet. On the *south* there are Hindu characteristics both numerous and undoubted as far in the same direction as *Cashmír*.

Then comes a change. To the north and west of Cashmir is a *Kohistan*, or *mountain-country*, which will soon require being described in detail. The line, however, which we are at present engaged upon is that of the northern boundary of the Valley of the Kabúl River, the mountains between Cabul and Herat, and the continuation of the same ridge from Herat to the south-eastern corner of the Caspian. *North* of this we have—roughly speaking—the Uzbek and Turcoman Turks; south of it, the Afghans and Persians Proper. Bokhara, however, is Persian, and the *Kohistan* in question is *not* Turk—whatever else it may be.

To proceed—this line runs nearly parallel to the southern shore of the Caspian. Of the provinces to the north of it, Asterabad is partly Turk and partly Persian; Mazenderan and Ghilan, Persian. From Ghilan northwards and westwards, the valleys of the Cyrus and Araxes form the chief exception; but, saving these, all is mountain and mountaineership. Indeed, it is Ararat and Armenia which lie on our left, and the vast and vague Caucasus which rears itself in front.

The simplest ethnology of the parts between this range, the Semitic area, and the sea, is that of the Persian province of Khorasan. With Persia we are so much in the habit of connecting ideas of Eastern pomp and luxury, that we are scarcely able to give it its true geographical conditions of general sterility. Yet it is really a desert with oases—a desert with oases for the far greater part of its area. And of all its provinces few are more truly so than Khorasan. Here we have a great elevated central table-land; preëminently destitute of rivers, and with but few towns. Of these Yezd is the chief in interest; the head-quarters of remains of the old fire-worship; Yezd the city of the Parsees, more numerous there than in all the others in Persia besides. Perhaps, too, it is the ethnological centre of the Persian stock; since in a

westerly direction they extend to Kurdistan, and in a northeastern one as far as Badukshan and Durwaz on the source of the Oxus.

The northern frontier is Turcoman, where the pastoral robbers of the parts between Bokhara and the Caspian encroach, and have encroached.

As far south as Shurukhs they are to be found; and east of Shurukhs they are succeeded by the Hazarehs—probably *wholly*, certainly *partially*, of Mongolian blood.

Abbasabad on the north-west is a Georgian colony. On the line between Meshed and Herat are several Kurd colonies. In Seistan we have Persians; but further south there are Biluch and Brahúi. Due east the Afghans come in.

Kerman is also Persian; and that to a greater degree than Khorasan. Fars is the same; yet west of Fars the population changes, and Arabian elements occur. They increase in Khuzistan; and in Irak Arabi we, at one and the same time, reach the rich alluvia of the Tigris and Euphrates and a doubtful frontier. Whether this was originally Arab or Persian is a matter of doubt.

From Irak we must subtract Laristan, and the Baktyari Mountains, as well as the whole north-western half. Hamadan is the ancient Ecbatana; the ancient Ecbatana was Median—

but that the Medes and Persians were as closely allied in blood as we suppose them to have been in their unalterable laws, is by no means a safe assumption. The existence of a *third* language in the arrow-headed inscriptions yet awaits a satisfactory explanation.

On the other hand, Mazenderan is wholly Persian; and so is Ghilan Proper. The Talish, however, to the north of that province, are, possibly, of another stock. Asterabad, as stated above, is a frontier province.

I think that there is good reason for believing Ajerbijan to have been, originally, other than Persian.

In Balkh and Bokhara, the older—but not necessarily the oldest—population appears to be Persian under recently immigrant Uzbek masters. Beyond these countries, the Persians reappear as the chief population; *i. e.*, in Badukshan and Durwaz.

Here the proper Persian population ends—but not either wholly or abruptly.

Three modifications of it occur—

1. In Biluchistan to the south-east.
2. In Kurdistan to the west.
3. In Afghanistan to the east.

Besides which, there are Persians encroaching upon the Armenian and Caucasian area in Shirvan, Erivan, and Karabagh—in all of which

countries, as well as in Ajerbijan, I believe it to have been intrusive.

The Biluch.—East and south-east of the proper Persians of Kerman come the Biluch, of Biluchistan. There is certainly a change of type here. Physically, the country is much like the table-land of Kerman. India, however, is approached; so that the Biluch are frontier tribes. To a certain extent they are encroachers. We find them in Sind, in Múltan, and in the parts between the Indus and the Sulimani Mountains, and in the middle part of the Sulimani Mountains themselves. They style themselves *Usul* or *The Pure*, a term which implies either displacement or intermixture in the parts around. Their language is a modified (many call it a *bad*) Persian. Philologically, however, it may be the older and more instructive dialect—though I have no particular reasons for thinking it so. Hindu features of physiognomy now appear. So do Semitic elements of polity and social constitution. We have tribes, clans, and families, with divisions and sub-divisions. We have a criminal law which puts us in mind of the Levites. We have classes which scorn to intermarry; and this suggests the idea of *caste*. Then we have pastoral habits as in Mongolia. The religion, however, is Mahometan, so that if any remains of the primitive Paganism, availa-

ble for the purposes of ethnological classification, still exist, they lie too far below the surface to have been observed.

Captain Postans distinguishes the Biluch from the Mekrani of Mekran; but of this latter people I know no good description. They are, probably, Kerman Persians. The hill-range between Jhalawan and Sind is occupied by a family which has commanded but little notice; yet is it one of the most important in the world, the Brahúi.

The Kurds.—A line drawn obliquely across Persia from Biluchistan towards the north-west brings us to another frontier population; a population conterminous with the Semitic Arabs of Mesopotamia, and the unplaced Armenians. These are mountaineers—the Kurds of Kurdistan. Name for name, they are *Carduchi* of the Anabasis. Name for name, they are the *Gordyæi*. Name for name, they are, probably, the *Chaldæi* and *Khasd-im*—a fact which engenders a difficult complication, since the Chaldæi, in the eyes of nine writers out of ten—though not in those of so good an authority as Gesenius—are Semitic. The Kurd area is preeminently irregular in outline. It is equally remarkable for its physical conditions. It is a range of mountains—just the place wherein we expect to find old and aboriginal populations

rather than new and intrusive ones. On the other hand, however, the Kurd form of the Persian tongue is not remarkable for the multiplicity and difference of its dialects—a fact which suggests the opposite inference. Kurds extend as far south as the northern frontier of Fars, as far north as Armenia, and as far west as the head-waters of the Halys. Have they encroached? This is a difficult question. The Armenians are a people who have generally given way before intruders; but the Arabs are rather intruders than the contrary. The Kurd direction is vertical; *i. e.*, narrow rather than broad, and from north to south (or *vice versâ*) rather than from east to west (or *vice versâ*), a direction common enough where it coincides with the valley of a river, but rare along a mountain chain. Nevertheless it reappears in South America, where the Peruvian area coincides with that of the Andes.

The Afghans.—The Afghan area is very nearly the water-system of the river Helmund. The direction in which it has become extended is east and north-east; in the former it has encroached upon Hindostan, in the latter upon the southern members of a class that may conveniently be called the Paropamisan. In this way (I think) the Valley of the Cabul River has become Afghan. Its relations to the Haza-

reh country are undetermined. Most of the Hazarehs are Mongolian in physiognomy. Some of them are Mongolian in both physiognomy and language. This indicates intrusion and intermixture—intrusion an intermixture which history tells us are subsequent to the time of Tamerlane. Phænomena suggestive of intrusion and intermixture are rife and common throughout Afghanistan. In some cases—as in that of Hazarehs—it is recent, or subsequent to the Afghan occupation; in others, it is ancient and prior to it.

Bokhara.—I have not placed the division containing the Tajiks of Balkh, Kúnduz, Durwaz, Badukshan, and Bokhara, on a level with that containing the Afghans, Kurds and Biluch, because I am not sure of its value. Probably, however, it is in reality as much a separate substantive class as any of the preceding. Here the intrusion has been so great, the political relations have been so separate, and the intermixed population is so heterogeneous as for it to have been, for a long time, doubtful whether the people of Bokhara were Persian or Turk. Klaproth, however, has shown that they belong to the former division, though subject to the Uzbek Turks. If so, the present Tajiks represent the ancient Bactrians and Sogdians—the Persians of the valley and water system of the Oxus. But what if these were intruders? I have little

doubt about the word *Oxus* (*Ok-sus*) representing the same root as the *Yak* in *Yaxsartes* (*Yak-sartes*), and the *Yaik*, the name of the river flowing into the northern part of the Caspian. Now this is the *Turanian* name for *river*, a name found equally in the Turk, Uguari, and Hyperborean languages. At any rate, Bokhara is on an ethnological frontier.

But Bactria and Sogdiana were Persian at the time of Alexander's successors; they were Persian at the very beginnig of the historical period. Be it so. The historical period is but a short one, and there is no reason why a population should not encroach at one time, and be encroached upon at another.

All the parts enumerated, and all the divisions, are so undoubtedly Persian, that few competent authorities deny the fact. The most that has ever been done is to separate the Afghans. Sir W. Jones did this. He laid great stress upon certain Jewish characteristics, had his head full of the Ten Tribes, and was deceived in a vocabulary of their languages. Mr. Norriss also is inclined to separate them, but on different grounds. He can neither consider the Afghan language to be Indo-European, nor the Persian to be otherwise. His inference is true, if his facts are. But what if the Persian be other than Indo-European? In that case they are both free to fall into the same category.

But the complexities of the Persian population are not complete. There is the division between the *Tajiks* and the *Iliyats;* the former being the settled occupants of towns and villages speaking Persian, the others pastoral or wandering tribes speaking the Arab, Kurd, and Turk languages. That *Tajik* is the same word as the root *Taoc*, in *Taoc-ene*, a part of the ancient country of Persis (now *Fars*), and, consequently, in a preëminent Persian locality, is a safe conjecture. The inference, however, that such was the original locality of the Persian family, is traversed by numerous—but by no means insuperable—difficulties. In respect to their chronological relations, the general statement may be made, that wherever we have Tajiks and Iliyats together, the former are the older, and the latter the newer population. Hence it is not in any Iliyat tribe that we are to look for any nearer approach to the aborigines, than what we find in the normal population. They are the analogues of the Jews and gipsies of Great Britain, rather than of the Welsh—recent grafts rather than parts of the old stock. In Afghanistan this was not so clearly the case. Indeed the inference was the other way.

The antiquities and history of Persia are too well known to need more than a passing allusion. The creed was that of Zoroaster; still existent,

in a modified (perhaps a corrupted, perhaps an improved) form, in the religion of the modern Parsis. The language of the Zoroastrian Scriptures was called Zend. Now the Zend is Indo-European—Indo-European and highly inflected. The *inflections*, however, in the modern Persian are next to none; and of those few it is by no means certain that they are Zend in origin. Nevertheless, the great majority of modern Persian words *are* Zend. What does this mean? It means that the philologist is in a difficulty; that the grammatical structure points one way, and the vocabulary another. This difficulty will meet us again.

India.—In the time of Herodotus, and even earlier, India was part of the Persian empire. Yet India was not Persia. It was no more Persia in the days of Darius than it is English now. The original Indian stock was and is peculiar—peculiar in its essential fundamentals, but not pure and unmodified. The vast extent to which this modification implies encroachment and intermixture, is the great key to nine-tenths of the complexities of the difficult ethnology of Hindostan. Whether we look to the juxtaposition of the different forms of Indian speech, the multiform degrees of fusion between them, the sections and sub-sections of their creeds—legion by name—the fragments of ancient paganism,

the differences of skin and feature, or the institution of caste, intrusion followed by intermixture, and intermixture in every degree and under every mode of manifestation, is the suggestion.

And now we have our duality; viz., the primitive element and the foreign one—the stock and the graft. Nothing is more certain than that the graft came from the north-west. Does this necessarily mean from Persia? Such is the current opinion; or, if not from Persia, from some of those portions of India itself nearest the Persian frontier. There are reasons, however, for refining on this view. Certain influences, foreign to India, may have come *through* Persia, without being Persian. The proof that a particular characteristic was introduced into India *via* Persia is one thing; the proof that it originated in Persia is another. They have often, however, been confounded.

In the south of India the foreign element is manifested less than in the north; so that it is the south of India which exhibits the original stock in its fullest form. Its chief characteristics are referable to three heads, physical form, creed, and language. In respect to the first, the southern Indian is darker than the northern—*cæteris paribus*, *i. e.* under similar external conditions; but not to the extent that a mountaineer of the Dekhan is blacker than a Bengali from the delta

of the Ganges. Descent, too, or caste influences color, and the purer the blood the lighter the skin. Then the lips are thicker, the nose less frequently aquiline, the cheek-bones more prominent, and the eyebrows less regular in the southrons. The most perfect form of the Indian face gives us regular and delicate features, arched eyebrows, an aquiline nose, an oval contour, and a clear brunette complexion. All this is Persian.

Depart from it and comparisons suggest themselves. If the lips thicken and the skin blackens, we think of the Negro; if the cheek-bones stand out, and if the eye —as it sometimes does—become oblique, the Mongol comes into our thoughts.

The original Indian creeds are best characterized by negatives. They are neither Brahminic nor Bhuddhist.

The language, for the present, is best brought under the same description. No man living considers it to be *Indo-European*.

In proportion as any particular Indian population is characterized by these three marks, its origin, purity, and indigenous nature become clearer—and *vice versâ*. Hence, they may be taken in the order of their outward and visible signs of aboriginality.

First come—as already stated—the South-

rons of the Continent ;* and first amongst these the mountaineers. In the Eastern Ghauts we have the Chenchwars, between the Kistna and the Pennar; in the Western the Cohatars, Tudas, Curumbars, Erulars, and numerous other hill-tribes: all agreeing in being either imperfect Brahminists or Pagans, and in speaking and languages akin to the Tamul of the coast of Coromandel; a language which gives its name to the class, and introduces the important philological term *Tamulian*. The physical appearance of these is by no means so characteristic as their speech and creed. The mountain *habitats* favor a lightness of complexion. On the other, it favors the Mongol prominence of the cheek-bones. Many, however, of the Tudas have all the regularity of the Persian countenance—yet they are the pure amongst the pure of the native Tamulian Indians.

In the *plains* the language is Tamulian, but the creed Brahminic; a state of evidence which reaches as far north as the parts about Chicacole east, and Goa west.

In the *South*, then, are the chief samples of the true Tamulian aborigines of Indian; the characteristics of whom have been preserved by the simple effect of distance from the point

* Observe—*not* of the island of Ceylon.

of disturbance. Distance, however, alone has been but a weak preservative. The combination of a mountain-stronghold has added to its efficiency.

In *Central* India one of these safeguards is impaired. We are nearer to Persia; and it is only in the mountains that the foreign elements are sufficiently inconsiderable to make the Tamulian character of the population undoubted and undeniable. In the Mahratta country and in Gondwana, the Ghonds, in Orissa the Kols, Khonds, and Súrs, and in Bengal the Rajmahali mountaineers are Tamulian in tongue and Pagan in creed—or, if not Pagan, but imperfectly Brahminic. But, then, they are all mountaineers. In the more level country around them the language is Mahratta, Udiya, or Bengali.

Now the Mahratta, Udiya* and Bengali are *not* unequivocally and undeniably Tamulian. They are so far from it, that they explain what was meant by the negative statement as to the Tamulian tongues not being considered *Indo-European*. This is just what the tongues in question *have* been considered. Whether rightly or wrongly is not very important at present. If rightly, we have a difference of language as

* Of Orissa.

primâ facie—but not as *conclusive*—evidence of a difference of stock. If wrongly, we have, in the very existence of an opinion which common courtesy should induce us to consider reasonable, a practical exponent of some considerable difference of some sort or other—of a change from the proper Tamulian characteristics to something else so great in its *degree* as to look like a difference in *kind*. With the Bengali—and to a certain extent with the other two populations—the foreign element approaches its *maximum*, or (changing the expression) the evidence of Tamulianism is at its *minimum*. Yet it is not annihilated. The physical appearance of the Mahratta, at least, is that of the true South Indian. Even if the language be other than Tamulian, the Hindus of northern India may still be of the same stock with those of Mysore and Malabar, in the same way that a Cornishman is a Welshman; *i. e.*, a Briton who has changed his mother-tongue for the English.

Intermediate to the Khonds and the Bengali, in respect to the evidence of their Tamulian affinities, are the mountaineers of north-western India. Here, the preservative effects of distance are next to nothing. Those, however, of the mountain-fastnesses supply the following populations—Berdars, Ramusi, Wurali, Paurias,

Kulis, Bhils, Mewars, Moghis, Minas, &c. &c., speaking languages of the same class with the Mahratta, Udiya, and Bengali, but all imperfectly Brahminic in creed.

The other important languages of India in the same class with those last-mentioned, are the Guzerathi of Guzerat, the Hindu of Oude, the Punjabi of the Punjab, and several others not enumerated—partly because it is not quite certain how we are to place them,* partly because they may be sub-dialects rather than separate substantive forms of speech. They take us up to the Afghan, Bilúch, and Tibetan frontier..

These have been dealt with. But there is one population, belonging to these self-same areas, with which we have further dealings. Biluchistan has been described; but not in detail. The Bilúch, that give their name to the country, have been noticed as Persian. But the Bilúch are as little the only and exclusive inhabitants of it, as the English are of Great Britain. We have our Welsh, and the Bilúch have their Brahúi.

Again—the range of mountains that forms the western watershed of the Indus is not

* The Cashmirian of Cashmír is in this predicament. It is not safe to say that it is Hindu rather than Persian, or Paropamisan, a term which will soon find its explanation.

wholly Afghan. It is Bilúch as well. But it is not wholly Bilúch. The Bilúch reach to only a certain point southwards. The range between the promontory of Cape Montze and the upper boundary of Kutch Gundava is *Brahúi*. There is no such word as *Brahúistan;* but it would be well if there were.

Now the language of the Brahúi belongs to the Tamulian family. The affinity by no means lies on the surface—nor is it likely that it should. The nearest unequivocally Tamulian dialect on the same side of India is as far south as Goa—such as exist further to the north being either central or eastern. Supposing, then, the original continuity, how great must have been the displacement; and if the displacement have been great, how easy may the transitional forms have disappeared, or, rather, how truly must they once have been met with!

However, the Brahúi affinities by no means lie on the surface. The language is known from one of the many valuable vocabularies of Leach. Upon this, no less a scholar than Lassen commented. Without fixing it, he remarked that the numerals were like those of Southern India. They are so, indeed; and so is a great deal more; indeed, the collation of the whole of the Brahúi vocabularies with the

Tamul and Khond tongues *en masse* makes the Brahúi Tamulian.

Is it original or intrusive? All opinion—*valeat quantum*—goes against it being the former. The mountain-fastness in which it occurs goes the other way.

* * * * *

Our sequence is logical rather than geographical: *i. e.*, it takes localities and languages, in the order in which they are subservient to ethnological argument rather than according to their contiguity. This justifies us in making a bold stride, in passing over all Persia, and in taking next in order—Caucasus, with all its conventional reminiscences and suggestions.

The languages of Caucasus fall into a group, which, for reasons already given, would be inconveniently called *Caucasian*, but which may conveniently be termed *Dioscurian*.* This falls into the following five divisions: 1. The Georgians; 2. the Iròn; 3. the Mizjeji; 4. the Lesgians; and 5. the Circassians.

1. *The Georgians.*—It is the opinion of Rosen that the central province of Kartulinia, of which Tiflis is the capital, is the original seat

* From the town of *Dioscurias*, in which Pliny says business was carried on through 130 interpreters—so numerous were the languages and dialects.

of the Georgian family; the chief reasons lying in the fact of that part of the area being the most important. Thus the language is called *Kartulinian;* whilst the provinces round about Kartulinia are considered as additions or accessions to the Georgian domain, rather than as integral and original portions of it—a fact which makes the province in question a sort of *nucleus.* Lastly, the Persian and Russian names, *Gurgistan* and *Gr-usia*, by which the country is most widely known, point to the valley of the Kur.

To all this I demur. The utmost that is proved thereby is the greater political prominence of the occupants of the more favored parts of the country; as the middle course of the Kur really is.

Of the two sides of the watershed that separates the rivers of the Black Sea * from those of the Caspian,† it is the *western* which has the best claim to be considered the original *habitat* of the Georgians. Here it is that the country is most mountainous, and the mountains most abrupt. Hence it is, too, that a population would have both the wish and power to migrate towards the plains rather than *vice versâ.*

More weighty still is the evidence derived from the dialects. The Kartulinian is spoken

* The Phasis, Tshorok, &c. † The Kur and Aras.

over more than half the whole of Georgia: whereas, for the parts *not* Kartulinian, we hear of the following dialects:—

1. The *Suanic*, on the head-waters of the small rivers between Mingrelia, and the southern parts of the Circassian area—the Ingur, the Okoumiskqual, &c. This is the most northern section of the Georgian family.

2, 3. The *Mingrelian* and the *Imiritian*.

4, 5. The *Guriel* and *Akulziki* in Turkish Georgia.

6. The *Lazic*.—This is the tongue of the most western dialects. The hills which form the northern boundary of the valley of the Tsorokh are the Lazic locality; and here the diversity has attained its *maximum*. Small as is the Lazic population, every valley has its separate variety of speech.

I believe, then, that in Central Caucasus the Kartulinian Georgians have been intrusive: and this is rendered probable by the character of the populations to the north and east of them. Between Georgia and Daghestan we have, in the preëminently inaccessible parts of the eastern half of Caucasus,* two fresh families, different from each other, different from the Lesgians, and different from the Circassians.

* The *Irôn* and *Mizjeji*.

With such reasons for believing the original direction of the Georgian area to have been westernly, we may continue the investigation. That they were the occupants of a considerable portion of the eastern half of the ancient Pontus, is probable from the historical importance of the Lazi in the time of Justinian, when a Lazic war disturbed the degenerate Romans of Constantinople. It is safe to carry them as far west as Trebizond. It is safe, too, to carry them farther. One of the commonest of the Georgian terminations is the syllable *-pe* or *-bi*, the sign of the plural number; a circumstance which gives the town of *Sino-pe* a Georgian look—*Sinope* near the promontory of *Culli-ppi*.

2. *The Irón.*—To the north-west of Tiflis we have the towns of Duchet and Gori, one on the Kur itself, and one on a left hand feeder of it. The mountains above are in the occupation of the *Irón* or *Osetes*. In Russian Georgia they amount to about 28,000. The name *Irón* is the one they give themselves: *Oseti* is what they are called by the Georgians. Their language contains so great a per-centage of Persian words or *vici versâ*, that it is safe to put them both in the same class. This has, accordingly, been done—and a great deal more which is neither safe nor sound has been done besides.

3. *The Mizjeji.*—Due east of the mountain-

eer Irón come the equally mountaineer Mizjeji, a family numerically small, but falling into divisions and sub-divisions. Hence, it has a pre-eminent claim to be considered aboriginal to the fastnesses in which it is found. The parts north of Telav, to the north-east of Tiflis, form the Mizjeji area. It is a small one—the Circassians bound it on the north, and on the east.

4. *The Lesgians* of Eastern Caucasus or Daghestan, next to the Circassians the most independent family of Caucasus. None falls into more divisions and subdivisions; *e.g.*

a. The *Maruláu* or *Mountaineers* (from *Marul—mountain*) speak a language called the Avar, of which the Anzukh, Tshari, Andi, Kabutsh, Dido and Unsoh are dialects.

b. The Kasi-kumuk.

c. The Akush.

d. The Kura of South Daghestan.

The displacements of the Irón and Mizjeji—and from the limited area of their occupancies, displacement is a legitimate inference—must have been chiefly effected by the Georgians alone; that of the Lesgians seems referable to a triple influence. That the Talish to the north of Ghilan are Lesgians who have changed their native tongue for the Persian, is a probable suggestion of Frazer's. If correct, it makes the province of Shirvan a likely part of the original

Lesgian area—encroachment having been effected by the Armenians, Persians, and Georgians.

5. *The Circassians* occupy the northern Caucasus from Daghestan to the Kuban; coming in contact with the Slavonians and Tartars, for the parts between the Sea of Azov and the Caspian. As both these are preëminent for encroachment, the earlier contact was, probably, that of the most northern members of the Circassian family, and the southern Ugrians. The divisions and subdivisions of the Circassian family are both numerous and strongly marked.

The Armenians.—Except amongst the mountaineer Irón and Mizjeji, there are Armenians over the whole of Russian Caucasus—mixed, for the most part, with Georgians. They are sojourners rather than natives. In Shirvan, Karabagh, and Karadagh they are similarly mixed with Persians and Turks. In this case, however, the Armenian population is probably the older; so that we are approaching the original nucleus of the family. In Erivan there are more Armenians than aught else; and in Kars and Erzerúm they attain their *maximum*. In Diarbekr the frontier changes, and the tribes which now indent the Armenian area are the Semitic Arabs and Chaldani of Mesopotamia, and the Persian Kurds of Kurdistan.

A great deal has been said about the extent

to which the Armenian language differs from the Georgian, considering the geographical contact between the two. True it is that the tongues are in contact *now*, and so they probably were 2000 years ago. Yet it by no means follows that they were always so. The Georgian has encroached, the Iron retreated; a fact which makes it likely that, at a time when there was no Georgian east of Imiritia, the Ossetic of Tshildir and the Armenian of Kars met on the Upper Kur. The inference drawn from the relations between the Mon, Khô and Thay tongues is repeated here, inasmuch as the Iron and Armenian are more alike than the Armenian and Georgian. As a rough measure of the likeness I may state the existence of the belief that both are Indo-European.

Asia Minor.—From Armenia the transition is to Asia Minor. One of the circumstances which give a preëminent interest and importance to the ethnology of Asia Minor is the certainty of the original stock being, at the present moment, either wholly extinct, or so modified and changed as to have become a *problem* rather than a *fact*. There is neither doubt nor shadow of doubt as to this—since it is within the historical period that this transformation has taken place. It is within the historical period that the Osmanli Turks, spreading, more immediately

from the present country of Turkestan, but remotely from the chain of the Altaic Mountains, founded the kingdom of Roum under the Seljukian kings, and as a preliminary to the invasion and partial occupation of Europe, made themselves masters of the whole country limited by Georgia, Armenia, Mesopotamia, and Syria on the east and south, and by the Euxine, the Bosporus, the Propontis, the Hellespont, and the Ægean Sea westwards. Since then, whatever may be the *blood*, the language has been Turk. This is, of course, *primâ facie* evidence of the stock being Turk also. Nor are there any *very* cogent reasons on the other side. The physiognomy is generally described as Turk, and the habits and customs as well.

Such is what we get from the general traveller—and a more minute ethnology than this has not yet been applied. What will be the result, when a severer test is applied, is another question. It is most probable that points of physiognomy, fragmentary traditions and superstitions, old customs, and peculiar idiotisms in the way of dialect, will point to a remnant of the older stock immediately preceding it. In such a case, the ethnological question becomes complicated—since the present Turks will be then supposed to have *mixed* with the older natives, rather than to have replaced them *in toto;* so

that the phænomena will rather be those exhibited in England (where the proportion of the *older* Celtic and the *newer* Anglo-Saxon is an open question) than those of the United States of America, where the blood is purely European, and where the intermixture of the aboriginal Indian—if any—goes for nothing.

Of the occupants of Asia Minor previous to the Osmanli Turks we can ascertain the elements, but not the proportions which they bore to each other.

1. There was an element supplied by the Byzantine Greek population—itself preëminently mixed and heterogeneous.

2. There was an element supplied by the purer Greek population of Greece Proper and the Islands.

3. There were, perhaps, traces of the old Greek populations of Æolia, Doris, and Ionia.

4. There was an extension of the Armenian population from the east.

5. Of the Georgian from the north-east.

6. Of the Semitic from the south-east.

7. There was also Arab and Syriac intermixture consequent on the propagation of Mahometanism.

8. There were also remnants of a Proper Roman population introduced during the time of the Republic and Western Empire; *e. g.*, of

the sort that the Consulate of Cicero would introduce into Cilicia.

9. There were also remnants of the *Persian* supremacy; *e. g.*, of a sort which would be introduced when it was a Satrapy of Tissaphernes or Pharnabazus.

10. Lastly, there would be traces of the *Macedonian* Greeks; whose impress would be stamped upon it during the period which elapsed between the fall of Darius and that of Antiochus.

All this suggests numerous questions—but they are questions of minute rather than general ethnology. The latter takes us to the consideration of the populations of the frontier. Here we find—

1. Georgians.
2. Armenians.
3. Semites of Mesopotamia and Syria.
4. Greeks of the Ægean Islands.
5. Bulgarians, and Turks of Thrace.

Of these, the last are recent intruders; so that the real ethnology to be considered is that of *ancient* Thrace. Unfortunately this is as obscure as that of Asia Minor itself.

The Greeks of the Ægean are *probably* intrusive; the other three are ancient occupants of their present areas.

Now, in arguing upon the conditions afford-

ed by this frontier, it is legitimate to suppose that each of the populations belonging to it had some extension beyond their present limits, in which case the *d priori* probabilities would be that—

1. On the north-west there was an extension of the Thracian population.

2. On the north-east, of the Georgian.

3. On the east, of the Armenian.

4. On the south, of the Syrian and Mesopotamian.

Now, the population of Asia Minor *may* have been a mere extension of the populations of the frontiers—one or all.

But it also may have been separate and distinct from any of them.

In this case, we are again supplied with an alternative.

1. The population may have been *one*—just as that of Germany is *one*.

2. The population may have fallen in several—nay, numerous divisions—so that the so-called races may have been *one, two, three, four*, or even more.

Dealing with these questions, we first ask what are the reasons for supposing the population—whether single or sub-divided—of Asia to have been *peculiar*; *i. e.*, different from that of the frontier areas—Georgia, Thrace, Armenia, Mesopotamia and Syria?

This is answered at once by the evidence of the Lycian Inscriptions, which prove the *Lycian*, at least, to have been distinct from all or any of the tongues enumerated.

The following extracts, however, from Herodotus carry us farther:

"The Lycians were originally out of Crete; since, in the old times, it was the Barbarians who held the whole of Crete. When, however, there was a difference in Crete, in respect to the kingdom, between the sons of Europa, Minos and Sarpedon, and when Minos got the best in the disturbance he (Minos) expelled both Sarpedon himself and his faction; and these, on their expulsion, went to that part of Asia which is the *Milyadic* land. For that country which the Lycians now inhabit, was, in the old times, *Milyas*; and the *Milya* were then called *Solymi*. For a time Sarpedon ruled over them. They called themselves by the name which they brought with them; and even now, the Lycians are called by the nations that dwell around them, *Termilæ*. But when Lycus, the son of Pandion, driven away from Athens, and like Sarpedon, by his brother (*Ægeus*), came to the Termilæ under Sarpedon, they, thence, in the course of time, were called, after the name of Lycus, Lycians. The usages are partly Cretan, partly Carian. One point, however, they have pecu-

liar to themselves, and one in which they agree with no other men. They name themselves after their mothers, and not from their fathers: so that if any one be asked by another *who he is*, he will designate himself as the son of his mother, and number up mother's mothers. Again, if a free woman marry a slave, the children are deemed free; whereas, if a man be even in the first rank of citizens, and take either a strange wife or a concubine, the children are dishonored."

Whilst Asia Minor was being conquered for Persia, under the reign of Cyrus, by Harpagus, the *Carians* made no great display of valor; with the exception of the citizens of Pedasus. These gave Harpagus considerable trouble; but, in time, were vanquished. Not so the Lycians. "The Lycians, as Harpagus marched his army towards the Xanthian plain, retreated before him by degrees, and, fighting few against many, showed noble deeds; but being worsted and driven back upon the town, they collected within the citadel their wives, and children, and goods, and servants. They then set light to the citadel to burn it down. This being done, they took a solemn oath, and, making a sally, died to a man, sword in hand. But of those Lycians who now called themselves Xanthians, the majority are, except eighty hearths, strangers (ἐπήλυδες). These

eighty hearths (families) were then away from the country. And so they escaped. Thus it was that Harpagus took Xanthus. In like manner he took Caunus. *For the Caunians resemble the Lycians in most things.*"

And now we have a *second* fact, the following, viz., *that what the Lycians were the Caunians were also.*

1. *The Caunians.*—According to the special evidence of Herodotus, the Caunians had two peculiar customs—one, to make no distinction between age and sex at feasts, but to drink and junket promiscuously—the other, to show their contempt of all strange foreign gods, by marching in armor to the Calyndian mountains, and beating the air with spears, in order to expel them from the boundaries of the Caunian land. Still the *Caunians were Lycian.*

Were any other nations thus Lycian? Caunian? Lyco-Caunian? or Cauno-Lycian? since the particular designation is unimportant.

The Carians.—The language of the Carians and the Caunians was the same; since Herodotus writes: *The Caunian nation has either adapted itself to the Carian tongue, or the Carian to Caunian.*

2. On the other hand, the worship of the national Eponymus was different. *The Lydians and Mysians share in the worship of the Carian*

Jove. These do so. As many, however, of different nations (ξένοι) *as have become identical in language with the Carians do not do so.*

And here comes a difficulty; one part of the fact connects, the other disconnects the Carians from the Lycians. The language goes one way, the customs another.

But this is not the only complication introduced by the *Carian* family. The whole question of their origin is difficult, and that of their affinities is equally so. It was from the islands to the continent, rather than from the continent to the islands, that the Carians spread themselves; and they did this as subjects of Minos, and under the name of Leleges. As long as the system of Minos lasted, these Carian Leleges paid no tribute, but furnished, when occasion required, ships and sailors instead. And this they did effectually, inasmuch as the Carian was one of the most powerful nations of its day, and, besides that, ingenious in warlike contrivances. Of such contrivances three were adopted by the Greeks, and recognized as the original invention of the Carians. The first of these was the crest for the helmet; the second, the *device* for the shield; the third, the *handle* for the shield. Before the Carians introduced this last improvement, the fighting-man hung his buckler by a leathern thong, either on his neck or

his left shoulder. Such was the first stage in the history of Carian Leleges, who were insular rather than continental, and Lelegian rather than Carian. It lasted for many years after the death of Minos; but ended in their being wholly ejected from the islands, and exclusively limited to the continent, by the Dorians and Ionians of Greece.

This would connect the

1. Carians with the aboriginal islanders of the Ægean—these being *Leleges*.

2. Also with the Caunians.

3. Also with the Lycians. Unfortunately, the evidence is not unqualified. It is complicated by

The native tradition.—The Carian race is not insular, but aboriginal to the continent; bearing from the earliest times the name it bears at the present time. As a proof of this, the worship of the Carian Jupiter is common to two other, unequivocally continental nations, the *Lydians* and the *Mysians*. All three have a share in a temple at Mylasa, and each of the three is descended from one of three brothers—Car, Lydus, or Myrus—the respective eponymi of Caria, Lydia, and Mysia.

All this is not written for the sake of any inference; but to illustrate the difficulties of the subject. A new series of facts must now be added—or rather two new ones.

1. There are special statements in the classics that the Phrygian, Armenian, and Thracian languages were the same.

2. One of the three languages of the arrow-headed inscriptions has yet to be identified with any existing tongue.

The reader is in possession of a fair amount of complications. They can easily be increased.

Instead of enlarging on them, I suggest the following doctrine:

1. That, notwithstanding certain conflicting statements, the populations of Mysia, Lydia, Caria, and part of Lycia, were closely allied.

2. That a language akin to the Armenian was spoken as far westwards as eastern Phrygia.

3. That some third population, either subject to Persia or in alliance with it, spoke the language of the Lycian inscriptions—properly distinguished by Mr. Forbes and others from the ancient Lycian of the Milyans—which last *may* have been Semitic.

4. That the third language of arrow-headed inscriptions, supposing its locality to have been Media, may have indented the north-eastern frontier.

5. That, besides the Greek, two intrusive languages may have been spoken in the north-west and south-western parts respectively, viz:

a. The Thracian of the opposite coast of the Bosporus.

b. The Lelegian of the islands.

Of these the former was, perhaps, Sarmatian, whilst the latter may have borne the same relation to the Carian as the Malay of Sumatra does to that of the Orang Binúa of the Malayan Peninsula.

It may be added, that the similarity of the name *Thekhes*, the *mountain* from which the 10,000 Greeks saw the sea, to the Turk *Tagh*, suggests the likelihood of Turk encroachments having existed as early as the time of Artaxerxes.

Lastly.—The termination-*der*, in *Scamander* (a bilingual appellation) and *Mæan-der*, indicates Persian intrusion of an equally early date,

Of the glosses collected by Jablonsky, none are illustrated by any modern language, except the following:

English	axe.
Lydian	*labr-ys*.
Armenian	*dabar*.
Persian	*tawar*.
Kurd	*teper*.
English	fire.
Phrygian	*pyr*.
Armenian	*pur*.
Afghan	*wur*, *or*.
Kurd	*ûr*.
Greek, &c.	*πυρ*, *fire*, *&c*.
English	dog.
Phrygian	*kyn*.
Armenian	*shun*.
Sanskrit	*shune*.
Lettish	*suns*.
English	bread.
Phrygian	*bekos*.
Armenian	*khaz*
Akush	*kaz*
English	water.
Phrygian	*hydôr*.
Armenian	*tshur*.
Greek, &c.	*ὕδωρ*, *water*, *&c*.

There is no denying that these affinities are Indo-European rather than aught else, and that they are Armenian as well: an objection to several of the views laid down in the preceding pages which I have no wish to conceal. However, all questions of this kind are a balance of conflicting difficulties. As a set-off to this, take the following table, where the Armenian affinites are Turk, Dioscurian, and Siberian also.

English	man.	Tobolsk	*ir.*
Scythian	*oior.*	Yeneseian	*eri.*
Uigur	*er.*	Teleut	*eri.*
Kasan	*ir.*	Kasach	*erin.*
Baskir	*ir.*	Casikumuk	*ioori.*
Nogay	*ir.*	Armenian	*air.*

The watershed of the Oxus and Indus.—We are in the north-eastern corner of Persia. The Púsh-ta-Khur mountain, like many other hills of less magnitude, contains the sources of two rivers, different in their directions—of the Oxus that falls into the Sea of Aral; and of the right branch of the Kúner, a feeder of the Cabul river—itself a member of the great water-system of the Indus. Its south-western prolongation gives us the corresponding watershed. This is a convenient point for the study of a difficult but interesting class of mountaineers, who may conveniently be called *Paropamisans* from the ancient name of the Hindu-kúsh.

Their northern limits are the heights in question. Southwards they reach the Afghan frontier in the Kohistan of Cabúl. Eastward they come in contact with India. There is no better way of taking them in detail than that of following the water-courses, and remembering the watersheds of the rivers.

I. *The Oxus.*—At the very head-waters of the Oxus, and in contact with the Kirghiz Turks of Pamer, comes the small population of Wokhan, speaking a language neither Turk nor Persian—at least not exactly Persian; and, next to Wokhan, Shughnan, where the dialect (possibly the language) seems to change. Roshan, next (along the Oxus) to Shughnan, seems to be in the same category. Durwaz, however, is simply Tajik. All are independent, and all Mahometan.

II. *The Indus.*—1. *The Indus.*—The Gilghit * river feeds the Indus; two other feeders that join it from the east being called the Hunz and the Burshala, Nil, or Nagar. The population of each of these rivers is agricultural, and is, accordingly, called *Dunghar*, a Hindu, but no native term. Their Rajah is independent; their religion a very indifferent Mahometanism.

* From Moorcroft's Travels in the Himalayan Provinces and Vigne's Cashmír.

On the Gilghit and the parts below its junction with the Hunz and Nagar rivers, the dialect (perhaps the language) seems to change, and the people are known as *Dardoh* (or Dards) and *Chilass Dardoh*—the Daradæ of the Greek and the Daradas of the Sanskrit writers. These, too, are imperfect Mahometans. The Dards and Dunghers carry us as far as Little Tibet (Baltistan) and the Cashmírian frontiers.

2. *The Jhelum.*—This is the river of the famous valley of Cashmír—the population whereof (with some hesitation) I consider Paropamisan.

3. *The Cabul River.*—1. *The Kúner.*—The eastern watershed of the Upper Kúner is common to the Gilghit river. The population is closely akin to the Dardoh and Dungher; its area being Upper and Lower Chitral, its language the Chitrali, its religion Shia Mahometanism.

South of the Chitral, on the *middle* Kúner, the creed changes, and we have the best known of the Paropamisans, the *Káffres* of Kafferistan, reaching as far westwards and northwards as Kunduz and Badukshan—the Kaffres, or Infidels, so called by their Mahometan neighbors, because they still retain their primitive paganism.

Now when we approach the Cabúl river it-

self, the direction of which, from west to east, is nearly at right angles with the Kúner, the characteristics of the Dardoh, Chitrali, and Kaffre populations decrease; in other words, the area is irregular, and the populations themselves either partially isolated or intermixed. Thus, along the foot of the mountains north of the Cabúl river and west of the Kúner, comes Lughmani country; the language being by no means identical with the Kafir, and the Kafir paganism being reduced to an imperfect Mahometan—*némchú Mussulman*, or *half Mussulman*, being the term applied to the speakers of the Lughmani tongue of the valley of the Nijrow and the parts about it.

The Der, Tirhye, and Pashai vocabularies of Leach all represent Paropamisan forms of speech spoken by small and, more or less, fragmentary populations.

The valley of the Lundye has, almost certainly, been within a recent period, Paropamisan. Thus is it that Elphinstone writes of its chief occupants: "The Swatis, who are also called Deggauns, appear to be of Indian origin. They formerly possessed a kingdom extending from the western branch of the Hydaspes to near Jellabahad. They were gradually confined to narrower limits by the Afghan tribes; and Swaut and Búnér, their last seats, were reduced by the

Eusofzyis in the end of the fifteenth century. They are still very numerous in those countries.' By *Indian* I believe a population akin to that of Cashmeer is *denoted*—I do not say *intended*. Another extract carries us further still: "The Shulmauni formerly inhabited Shulmaun, on the banks of the Korrum. They afterwards moved to Tira, and in the end of the fifteenth century they were in Hustnugger, from which they were expelled by the Eusofzyes. The old Afghan writers reckon them Deggaums, but they appear to have used the word loosely. There are still a few Shulmauni in the Eusofzye country who have some remains of a peculiar language."

Hence, the Paropanisans may safely be considered as a population of a receding frontier, the encroachment upon their area having been Afghan. With these the Asiatic populations end.

* * * * *

If we now look back upon the ground that has been gone over, we shall find that the evidence of the human family have originated in one particular spot, and having diffused itself from thence to the very extremities of the earth, is by no means absolute and conclusive. Still less is it certain that that particular spot has been ascertained. The present writer *believes*

that it was somewhere in intratropical Asia, and that it was *the single locality of a single pair*—without. however, professing to have proved it. Even this centre is only *hypothetical*—near, indeed, to the point which he looks upon as the starting-place of the human migration, but by no means identical with it. The Basks and Albanians he does not pretend to have affiliated; but he does not, for this reason, absolutely isolate them. They have too many *miscellaneous* affinities to allow them to stand wholly alone.

In the way of physical conformation, the Hottentot presents the *maximum* of peculiarities. The speech, however, of the latter is simply African; whilst, in form and color, the Basks and Albanians are European. A fly is a fly even when we wonder how it came into the amber; and men belong to humanity even when their origin is a mystery. This gives us a composition of difficulties, and it is by taking this and similar phænomena into account, that the higher problems in ethnology must be worked. Nothing short of a clear and comprehensive view of the extent to which points of difference in one department are compensated by points of likeness in another, will give us a philosophical hypothesis; all *partial* argument from partial points of disagreement beeing as unscien-

tific as a similar overvaluation of resemblances.

As for the detail of the chief difficulties, the writer believes that he, unwillingly and with great deference, differs from the best authorities, in making so little of the transition from America to Asia, and so much of that between Europe and Asia. The conviction that the Semitic tongues are simply African, and that all the theories suggested by the term *Indo-European* must be either abandoned or modified, is the chief element of his reasoning upon this point—reasoning far too elaborate for a small work like the present. He also believes that the languages of Kafferistan, the Dardoh country, and north-eastern Afghanistan, are transitional to the monosyllabic tongues and those of Persia—in other words, that the modern Persian is much more monosyllabic than is generally supposod. Yet even this leaves a break. How far the most *western* tongue of this class can be connected with those of Europe, and how far the most *south*-western one has Semitic affinities, are questions yet to examine—questions beset with difficulties. However, as the skeleton of system he believes the present work to be true, as far as it goes, and at the same time convenient for the investigator. That there is much in all classifications which requires to be unlearnt, is certain.

Lest any one think this a presumptuous saying, let him consider the new and unsettled state of the science, and the small number of the laborers as compared with the extent of the field.

THE END.

Rask's Semantics of Roots,
Rask.
Works on Monosyllabic

Areas of Languages - Mutually unintelligible tongues lie in close prompts. 102.

Romanic languages. 178.

Celts, - primitive habitat. 178. 173.
Magyars. 1st 177. 179. 180.
Gothic Race. primitive habitat. 178. 173.
Slavonic Race. 175.
Basque Language 185. 186.
Albanian do. 185.
Pelasgian & Etruscan. 186.
Indo-European. 188.
Turanian 187.
Relation of physiological to philological groups. 187-
Rask's Theory of primary Strata of Europ. & Asiat. Race,
Relation of Asiatic to American languages. 195.
Area of monosyllabic tongues 198. 203.
Accompanying circumstances to Mutually unintelligible languages. Monosyllabic. 203.
Siamese & Shan groups. 204
Works on Monosyllabic Languages. 204
Doubts of Author as to Early Civilization in China. 2
Isolation of Chinese Sea prom. any Continent but E. Asia
Causes of Chinese Exclusiveness &c. 214.
Line Circumscribing the Indo-Europeans. 218.
Chaldeans nonsemitic. 223